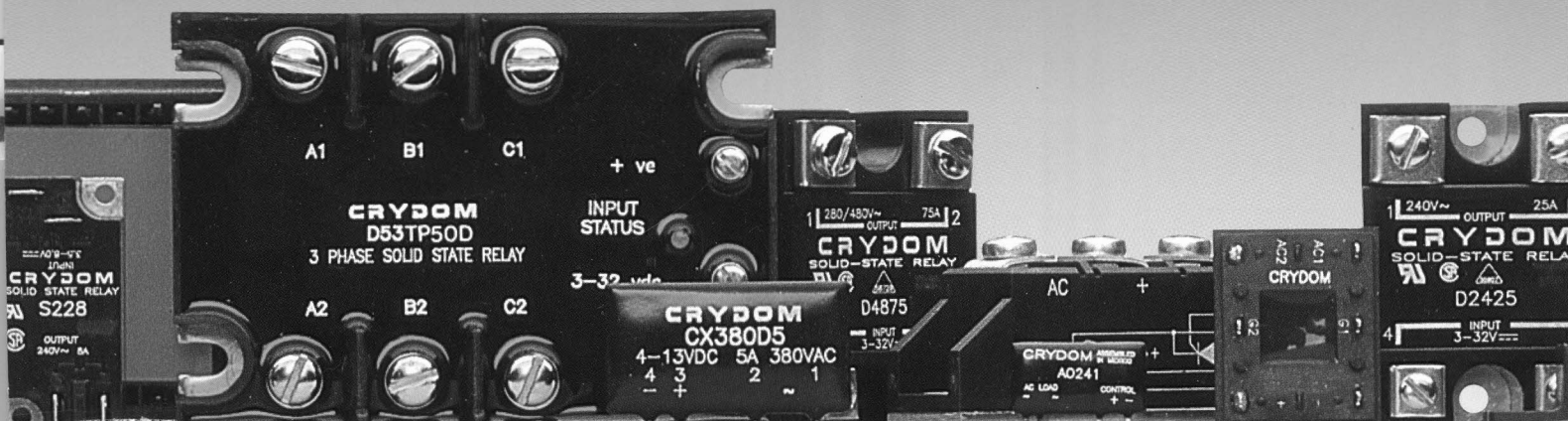


Solid State Relays

Input/Output Modules

Power Modules

CRYDOM



SOLID STATE RELAYS

CRYDOM

PRODUCT CATALOG CONTENTS

Solid State Relays

PCB MOUNT	Page
Series AO241	2
Series DO061	2
Series CX	3
Series CMX	3
Series 3	4
Series D2W	4
PANEL MOUNT	
Series 1	5
Series 2	6
Series H12	6
Series HA/HD	7
Series CS/CT	8
Series EZ	8
Series T	9
Series DC60	10
Series 1-DC	10
Dual/Quad Relays	11
Series 53TP	12
Series DSD/DLD	12
Series SST	13
Series CPV	13

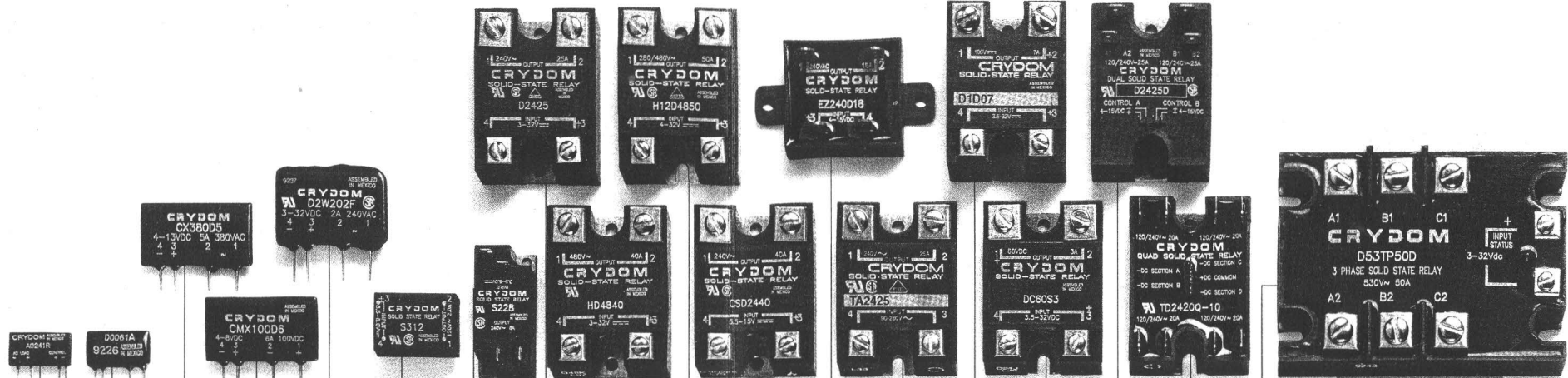
I/O Modules

	Page
Series IAC/IDC	14
Series ODC/OAC	14
Series DMP	16
Series MP	16
Series 6	17
Series PB	18
Relay Accessories	18

Power Modules

	Page
Series L	19
Series B-2T	20
Series B-2	20
Series M50	21
Series F18	22
Series EF	23
Series B48-2T	24
Series B48-2	24
Series M50 (Diode)	25

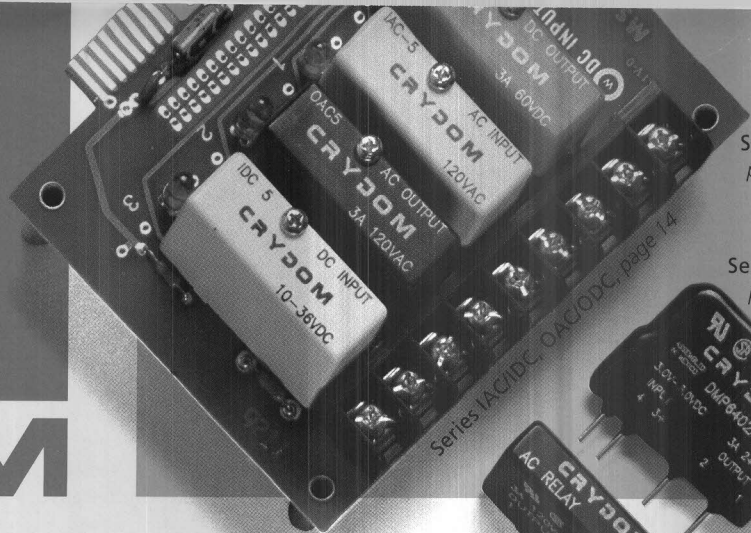




SERIES AO/ASO	SERIES DO/DMO	SERIES CX	SERIES CMX	SERIES D2W	SERIES 3	SERIES 2	SERIES 1	SERIES HA/HD	SERIES H12	SERIES CS/CT	SERIES EZ	SERIES T	SERIES 1-DC	SERIES DC60	DUAL RELAYS	QUAD RELAYS	SERIES 53TP	PRODUCT SERIES
AC	DC	AC	DC	AC	AC	AC	AC	AC	AC	AC	AC	AC	DC	DC	AC	AC	AC	OUTPUT
MINI-SIP	MINI-SIP	ULTRA HIGH SURGE	EXTRA LOW ON-STATE RESISTANCE	SIP PACKAGE	HIGH PACKAGING DENSITY	QUICK CONNECT TERMINALS	AC AND DC CONTROL	1200 VOLT BLOCKING	1200 VOLT BLOCKING	LOW LEAKAGE	QUICK CONNECT TERMINALS	SCREW TERMINALS OR QUICK CONNECT OPTION	MOSFET OUTPUT	4000 VOLT ISOLATION	INDUSTRY STANDARD PACKAGE	INDUSTRY STANDARD PACKAGE	AC OR DC CONTROL	FEATURES
.100 LEAD SPACING	.100 LEAD SPACING	SCR OUTPUT	MOSFET OUTPUT	TRIAC OUTPUT	SMALL FOOTPRINT	LOW LEAKAGE AVAILABLE	INDUSTRY STANDARD PACKAGE	AC AND DC CONTROL	SWITCHES UP TO 660Vdc	INDUSTRY STANDARD PACKAGE	SCR OUTPUT	AC OR DC CONTROL	LOW ON-STATE RESISTANCE	COST EFFECTIVE	PHASE CONTROL OPTION	TRIAC OUTPUT	LED STATUS INDICATOR	
1.0A-1.5A 280Vac	1.0A-5.0A 60-100Vdc	5.0A 280-660Vac	6.0A-10A 60-100Vdc	2.0A-3.5A 280Vac	3.0A 140-280Vac	8.0A 140-280Vac	2.5A-90A 140-280Vac	12A-90A 530Vac	50A-90A 530-660Vac	10A-90A 280Vac	12A-18A 280Vac	10A-25A 140-280Vac	7A-40A 100-500Vdc	3A-7A 60Vdc	25A-40A 280Vac	20A 280Vac	25A-50A 530Vac	CONTACT RATINGS
FORM A (SPST-NO)	FORM A (SPST-NO)	FORM A (SPST-NO)	FORM A (SPST-NO)	FORM A (SPST-NO)	FORM A (SPST-NO)	FORM A (SPST-NO)	FORM A (SPST-NO) FORM B	FORM A (SPST-NO)	FORM A (SPST-NO)	FORM A (SPST-NO)	FORM A (SPST-NO)	FORM A (SPST-NO) FORM B	FORM A (SPST-NO)	FORM A (SPST-NO)	FORM A (X2) (ALL ISOLATED)	FORM A (X4) (ALL ISOLATED)	TRIPLE POLE SINGLE THROW	CONTACT ARRANGEMENT
TRIAC OR SCR AC SWITCH	BIPOLAR TRANSISTOR OR MOSFET	SCR AC SWITCH	MOSFET	TRIAC	TRIAC	TRIAC	SCR AC SWITCH	SCR AC SWITCH	SCR AC SWITCH	TRIAC OR SCR AC SWITCH	SCR AC SWITCH	TRIAC	MOSFET	BIPOLAR TRANSISTOR	SCR AC SWITCH	TRIAC	SCR AC SWITCH	OUTPUT SWITCHING DEVICE
40A	5A	250A	100A	Up to 80A	55A	120A	Up to 1200A	Up to 1200A	Up to 1200A	Up to 1200A	Up to 1200A	Up to 250A	Up to 106A	10A	Up to 500A	250A	Up to 625A	SURGE CURRENT
600Vp	Up to 100Vdc	Up to 1200Vp	Up to 100Vdc	600Vp	600Vp	600Vp	Up to 600Vp	1200Vp	1200Vp	600Vp	600Vp	600Vp	Up to 500Vdc	60Vdc	600Vp	600Vp	1200Vp	BLOCKING VOLTAGE
2500Vrms	4000Vrms	4000Vrms	2500Vrms	4000Vrms	4000Vrms	2500Vrms	4000Vrms	4000Vrms	4000Vrms	4000Vrms	4000Vrms	4000Vrms	2500Vrms	4000Vrms	2500Vrms	2500Vrms	4000Vrms	ISOLATION VOLTAGE
ZERO-CROSS/ RANDOM TURN-ON	NOT APPLICABLE	ZERO-CROSS/ RANDOM TURN-ON	NOT APPLICABLE	ZERO-CROSS	ZERO-CROSS	ZERO-CROSS	ZERO-CROSS/ RANDOM TURN-ON	ZERO-CROSS/ RANDOM TURN-ON	ZERO-CROSS	ZERO-CROSS	ZERO-CROSS/ RANDOM TURN-ON	ZERO-CROSS	NOT APPLICABLE	NOT APPLICABLE	ZERO-CROSS/ RANDOM TURN-ON	ZERO-CROSS/ RANDOM TURN-ON	ZERO-CROSS/ RANDOM TURN-ON	SWITCHING TYPE
4-10Vdc	3-9Vdc 1.7-9Vdc	3-15Vdc 15-32Vdc 90-140Vac	3-10Vdc	3-32Vdc	3.5-8Vdc	3.5-8Vdc	3-32Vdc 90-280Vac 18-36Vac	3-32Vdc 90-280Vac 18-36Vac	4-32Vdc 90-140Vac	3.5-15Vdc 15-32Vdc	4-15Vdc	3-32Vdc 90-280Vac 18-36Vac	3.5-32Vdc	3-32Vdc	4-15Vdc	4-15Vdc	3-32Vdc 90-280Vac	INPUT CONTROL (COIL) VOLTAGE
UL, CSA	PENDING	UL, CSA, VDE	UL	UL, CSA	UL, CSA	UL, CSA	UL, CSA, VDE	UL, CSA	UL, CSA, VDE	UL, CSA	PENDING	UL, CSA, VDE	UL	PENDING	UL, CSA	UL	PENDING	APPROVALS
2	2	3	3	4	4	6	5	7	6	8	8	9	10	10	11	11	12	PAGE NUMBER
PANEL MOUNT																		

PANEL MOUNT

CRYDOM



Series PB
page 18

Series DMP
page 16

Series MP
page 16

INPUT/OUTPUT MODULES

AUXILIARY FUNCTION MODULES

POWER MODULES



Series SST
page 13

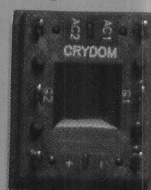


Series
DSD/DLD
page 12

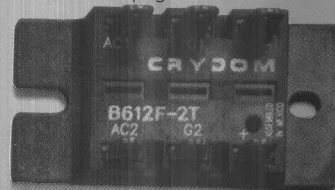


Series CPV
page 13

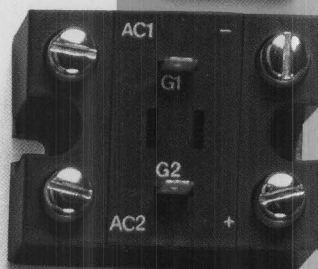
Series L
page 19



Series B-2T, B-2
page 20



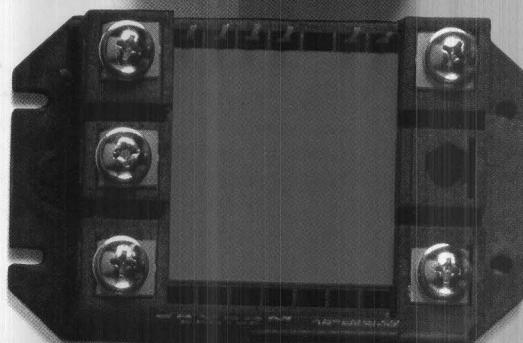
Series M50
page 21



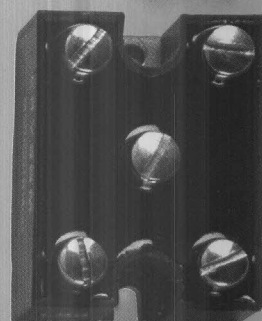
Series F18
page 22



Series EF
page 23



Series M50
(Diode)
page 25



Series
B48-2T, B48-2
page 24



CRYDOM

Series AO241

1-1.5Amp
AC MINI-SIP

SMT

- DC Control, AC Output
- Triac or SCR Output

Models AO241/R and the new ASO241/R are 1.0A/1.5A rated SPST-NO miniature SIP solid state relays. All models are available in zero-cross and random turn-on ("R") versions. With an SCR AC switch on the output, the ASO241/R although designed for switching highly inductive, low current loads such as solenoids is also suitable for all loads up to 1.5A.

Crydom Model Number	Line Voltage Range (Vac)	Load Current Range (Arms)	Control Voltage Range (Vdc)	Must Operate Voltage (Vdc)	Must Release Voltage (Vdc)	Surge Current 1-Cycle (Apk)
AO241	24-280	.02-1.0	4-10	4.0	1.0	40
AO241R	24-280	.02-1.0	4-10	4.0	1.0	40
ASO241	12-280	.01-1.5	4-10	4.0	1.0	10
ASO241R	12-280	.01-1.5	4-10	4.0	1.0	10

GENERAL SPECIFICATIONS

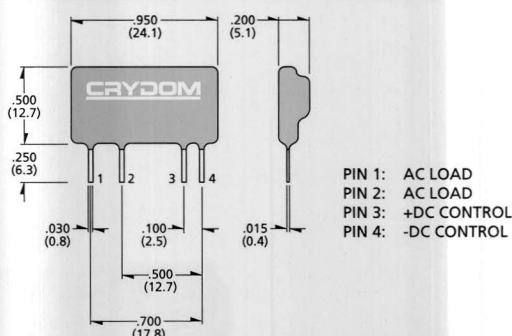
Operating Temperature Range: -30°C to 80°C
Isolation Voltage: 2500 Vrms

APPROVALS

UL E116950 (AO Only)
CSA LR81689 (AO Only)

MECHANICAL

All dimensions are in inches (millimeters)



Series DO061

1-5Amp
DC MINI-SIP

SMT

- DC Control
- Bipolar or MOSFET Output

SPST-NO DC output relays in epoxy-coated packages utilize the popular .10" grid lead spacing. They are available with either bipolar transistor output (DO), or the new DMO Series with MOSFET output rated at 3A/100 VDC, or 5A/60 VDC.

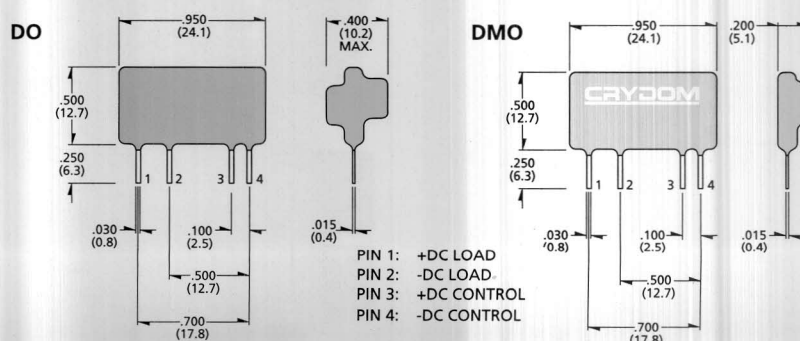
Crydom Model Number	Line Voltage Range (Vdc)	Load Current Range (Adc)	Control Voltage Range (Vdc)	Must Operate Voltage (Vdc)	Must Release Voltage (Vdc)	Surge Current 1 Sec. (Apk)
DO061A	3-60	.02-1.0	3-9	3.0	1.0	5.0
DO061B	3-60	.02-1.0	1.7-9	1.7	0.8	5.0
DMO065	0-60	0-5.0	3-10	3.0	1.0	20
DMO103	0-100	0-3.0	3-10	3.0	1.0	12

GENERAL SPECIFICATIONS

Operating Temperature Range: -30°C to 80°C
Isolation Voltage: 4000 Vrms (DO Models) 2500 Vrms (DMO Models)

MECHANICAL

All dimensions are in inches (millimeters)



SMT

Denotes Surface Mount Technology Construction.

CRYDOM

DC INPUT MODELS

Crydom Model Number	Line Voltage Range (Vac)	Load Current Range (Arms)	Control Voltage Range (Vdc)	Must Operate Voltage (Vdc)	Must Release Voltage (Vdc)	Surge Current 1-Cycle (Apk)
CX240D5	12-280	.06-5.0	3-15	3.0	1.0	250
CX240D5R	12-280	.06-5.0	3-15	3.0	1.0	250
CXE240D5	12-280	.06-5.0	15-32	15.0	1.0	250
CXE240D5R	12-280	.06-5.0	15-32	15.0	1.0	250
CX380D5	48-530	.06-5.0	4-13	4.0	1.0	250
CXE380D5	48-530	.06-5.0	15-32	15.0	1.0	250
CX480D5	48-660	.06-5.0	4-13	4.0	1.0	250
CXE480D5	48-660	.06-5.0	15-32	15.0	1.0	250

AC INPUT MODELS

Crydom Model Number	Line Voltage Range (Vac)	Load Current Range (Arms)	Control Voltage Range (Vac)	Must Operate Voltage (Vac)	Must Release Voltage (Vac)	Surge Current 1-Cycle (Apk)
CX240A5	12-280	.06-5.0	90-140	90.0	10.0	250
CX240A5R	12-280	.06-5.0	90-140	90.0	10.0	250
CXE240A5	12-280	.06-5.0	18-36	18.0	2.0	250
CXE240A5R	12-280	.06-5.0	18-36	18.0	2.0	250

GENERAL SPECIFICATIONS

Operating Temperature Range: -30°C to 80°C
Isolation Voltage: 4000 Vrms

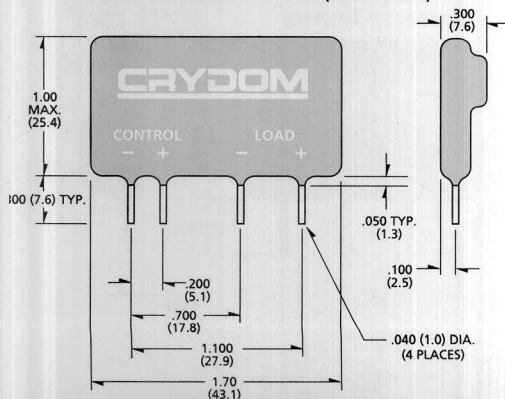
APPROVALS

UL E116949 (DC Input Only)
CSA LR81689 (DC Input Only)
VDE 70938 (240 & 380V, DC Input Only)

Crydom Model Number	Line Voltage Range (Vdc)	Load Current Range (Adc)	Control Voltage Range (Vdc)	Must Operate Voltage (Vdc)	Must Release Voltage (Vdc)	Surge Current 10 ms (Apk)
CMX100D6	0-100	0-6	3-10	3.0	1.0	100
CMX60D10	0-60	0-10	3-10	3.0	1.0	100

MECHANICAL

All dimensions are in inches (millimeters)



GENERAL SPECIFICATIONS

Operating Temperature Range: -30°C to 80°C
Isolation Voltage: 2500 Vrms

APPROVALS

UL E116950

Series CX

5Amp
AC SIP

SMT

- SCR Output
- Ultra High Surge Rating
- Normally Closed Option (-B) Available

Crydom's family of SPST-NO relays achieves the highest power switching capability in a PC-mounted air-cooled package. Advanced features include exceptional steady state current, plus ultra-high surge ratings. Models are available to switch up to 660 Vrms with AC or DC control, and either zero-cross or random turn-on ("R") switching versions. Pinout is compatible with Series 6 and OAC type I/O modules.

Series CMX

6-10Amp
DC SIP

SMT

- MOSFET Output
- Extra Low On-state Resistance
- Printed Circuit Board Mounting

New DC output SPST-NO solid state relays use MOSFET output for high switching capabilities in a PC-mount air-cooled package. Pinouts are compatible with Series 6 and ODC type I/O modules.

CRYDOM

Series 3

3Amp
120/240 VOLT
AC OUTPUT

SMT

- Small Footprint
- Printed Circuit Board Mounting
- High Packaging Density

These solid state relays combine small size and high ratings in a PC-board-mounted SPST-NO design. Available with (S30 types) or without snubber network (S3 types), Series 3 is an ideal replacement for power reed relays in microprocessor or computer-based logic level systems. Designed for long, reliable service in demanding industrial environments.

Crydom Model Number	Line Voltage Range (Vac)	Load Current Range (Arms)	Control Voltage Range (Vdc)	Must Operate Voltage (Vdc)	Must Release Voltage (Vdc)	Surge Current 1-Cycle (Apk)
S312	20-140	.01-3.0	3.5-8	3.5	1.0	55
S3012A	20-140	.02-3.0	3.5-8	3.5	1.0	55
S322	40-280	.01-3.0	3.5-8	3.5	1.0	55
S3022A	40-280	.02-3.0	3.5-8	3.5	1.0	55

GENERAL SPECIFICATIONS

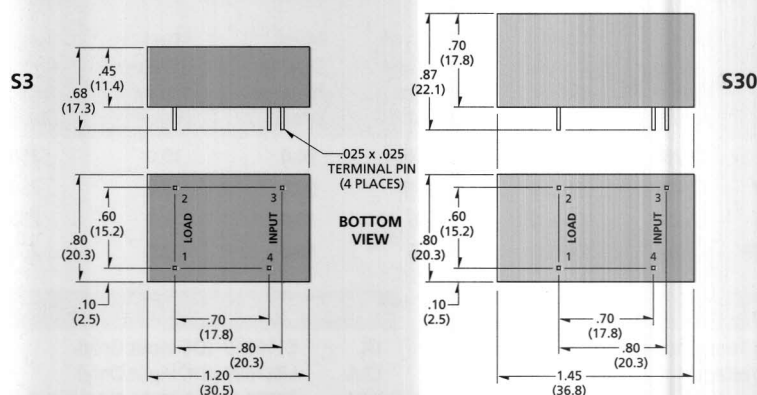
Operating Temperature Range: -30°C to 80°C
Isolation Voltage: 4000 Vrms

APPROVALS

UL E116949
CSA LR81689

MECHANICAL

All dimensions are in inches (millimeters)



Series D2W

2-3.5Amp
AC SIP

SMT

- Triac Output
- Printed Circuit Board Mounting

The D2W Series features an epoxy-coated package for exceptional environmental protection. Pinouts are compatible with Series 6 and OAC type I/O modules.

Crydom Model Number	Line Voltage Range (Vac)	Load Current Range (Arms)	Control Voltage Range (Vdc)	Must Operate Voltage (Vdc)	Must Release Voltage (Vdc)	Surge Current 1-Cycle (Apk)
D2W202F	24-280	.06-2.0	3-32	3.0	1.0	28
D2W203F	24-280	.06-3.0	3-32	3.0	1.0	70
D2W203F-11	24-280	.06-3.5	3-32	3.0	1.0	80

GENERAL SPECIFICATIONS

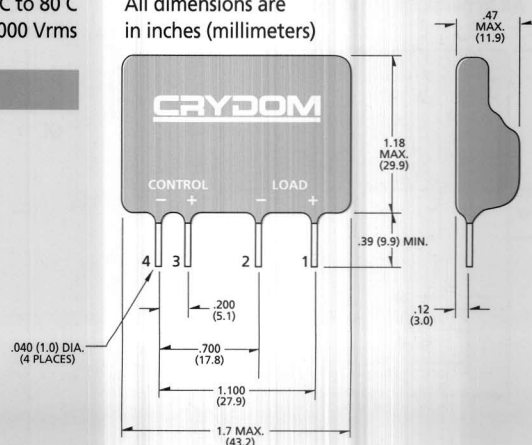
Operating Temperature Range: -30°C to 80°C
Isolation Voltage: 4000 Vrms

APPROVALS

UL E116950
CSA LR81689

MECHANICAL

All dimensions are in inches (millimeters)



CRYDOM

DC CONTROL MODELS-SCR OUTPUT

Crydom Model Number	Line Voltage Range (Vac)	Load Current Range (Arms)	Control Voltage Range (Vdc)	Must Operate Voltage (Vdc)	Must Release Voltage (Vdc)	Surge Current 1-Cycle (Apk)
D1202	24-140	.04-2.5	3-32	3.0	1.0	25
D1210	24-140	.04-10	3-32	3.0	1.0	120
D1225	24-140	.04-25	3-32	3.0	1.0	250
D1240	24-140	.04-40	3-32	3.0	1.0	625
D2402	48-280	.04-2.5	3-32	3.0	1.0	25
D2410	48-280	.04-10	3-32	3.0	1.0	120
D2425	48-280	.04-25	3-32	3.0	1.0	250
D2450	48-280	.04-50	3-32	3.0	1.0	625
D2475	48-280	.04-75	3-32	3.0	1.0	1000
D2490	48-280	.04-90	3-32	3.0	1.0	1200

AC CONTROL MODELS-SCR OUTPUT

Crydom Model Number	Line Voltage Range (Vac)	Load Current Range (Arms)	Control Voltage Range (Vac)	Must Operate Voltage (Vac)	Must Release Voltage (Vac)	Surge Current 1-Cycle (Apk)
A1202	24-140	.04-2.5	90-280	90.0	10.0	25
A1210	24-140	.04-10	90-280	90.0	10.0	120
A1225	24-140	.04-25	90-280	90.0	10.0	250
A1240	24-140	.04-40	90-280	90.0	10.0	625
A2402	48-280	.04-2.5	90-280	90.0	10.0	25
A2410	48-280	.04-10	90-280	90.0	10.0	120
A2425	48-280	.04-25	90-280	90.0	10.0	250
A2450	48-280	.04-50	90-280	90.0	10.0	625
A2475	48-280	.04-75	90-280	90.0	10.0	1000
A2490	48-280	.04-90	90-280	90.0	10.0	1200

GENERAL SPECIFICATIONS

Operating Temperature Range: -30°C to 80°C
 Isolation Voltage: 4000 Vrms
 Minimum Off-State dv/dt: 500V/μsec

APPROVALS

UL E116949
 CSA LR81689
 VDE 58729 (Not Applicable: -B and 4D)

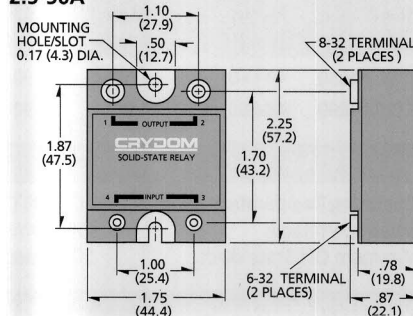
AVAILABLE OPTIONS

- 10** Non-Zero Cross, Phase Controllable
10-90 Amp Models Only
Example: **D2450-10**
- B** Normally Closed (Form B)
10-90 Amp Models Only,
DC Control Models Only
Example: **D2450-B**
- 4D** 400 Hz Operation
2.5-50 Amp Models Only,
Zero Cross Switching Only
Example: **4D2450**
- E** 24 VAC Input (18-36 Vac)
Example: **A2450E**

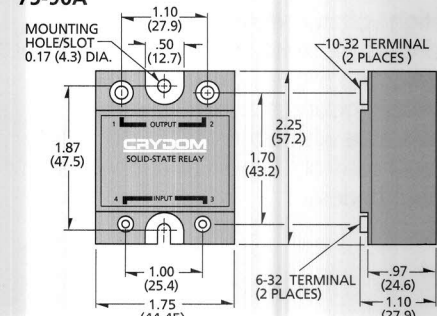
MECHANICAL

All dimensions are in inches (millimeters)

2.5-50A



75-90A



Note: Terminal screws and saddle clamps furnished, unmounted.

Series 1

2.5-90Amp
 120/240 VOLT
 AC OUTPUT

SMT

- Zero Voltage and Random Turn-on Switching
- Panel Mount

Featuring state-of-the-art Surface Mount Technology, these SPST-NO relays deliver proven reliability in the most demanding applications. Output consists of an SCR AC switch and is available in zero-cross, random turn-on (phase controllable) and normally closed (Form B) versions with either AC or DC input (coil) control.

CRYDOM

Series 2

8Amp
120/240 VOLT
AC OUTPUT

SMT

- Zero Voltage Switching
- 2500 Volt Isolation
- Panel Mount

Relays combine small size and high ratings in a package designed for easy heat sink or panel mounting. Standard .187 push-on terminals assure quick connection and are arranged to provide maximum isolation between signal and power circuits. Model S228C is a snubberless design for applications that require low off-state leakage.

Crydom Model Number	Line Voltage Range (Vac)	Load Current Range (Arms)	Control Voltage Range (Vdc)	Must Operate Voltage (Vdc)	Must Release Voltage (Vdc)	Surge Current 1-Cycle (Apk)
S218	20-140	.02-8.0	3.5-8	3.5	1.0	120
S228	40-280	.02-8.0	3.5-8	3.5	1.0	120
S228C	40-280	.02-8.0	3.5-8	3.5	1.0	120

GENERAL SPECIFICATIONS

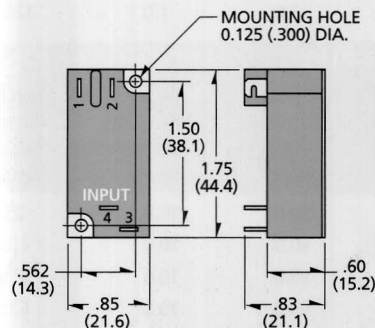
Operating Temperature Range: -30°C to 80°C
Isolation Voltage: 2500 Vrms

APPROVALS

UL E116949
CSA LR81689

MECHANICAL

All dimensions are in inches (millimeters)



Series H12

50-90Amp
HIGH VOLTAGE
AC OUTPUT

SMT

- 1200 Volt Blocking
- Up to 660 VAC
- Panel Mount

High voltage relays use IC driven circuits for switching loads up to 660 VAC. All models come with 1200 Volts blocking standard and are available with either AC or DC input (coil) control. Types CA and WD are Snubberless.

DC CONTROL MODELS-SCR OUTPUT

Crydom Model Number	Line Voltage Range (Vac)	Load Current Range (Arms)	Control Voltage Range (Vdc)	Must Operate Voltage (Vdc)	Must Release Voltage (Vdc)	Surge Current 1-Cycle (Apk)
H12WD4850	48-660	.04-50	4-32	4.0	1.0	625
H12WD4890	48-660	.04-90	4-32	4.0	1.0	1200
H12D4850	48-530	.04-50	4-32	4.0	1.0	625
H12D4890	48-530	.04-90	4-32	4.0	1.0	1200

AC CONTROL MODELS-SCR OUTPUT

Crydom Model Number	Line Voltage Range (Vac)	Load Current Range (Arms)	Control Voltage Range (Vac)	Must Operate Voltage (Vac)	Must Release Voltage (Vac)	Surge Current 1-Cycle (Apk)
H12CA4850	48-660	.04-50	90-140	90.0	10.0	625
H12CA4890	48-660	.04-90	90-140	90.0	10.0	1200

GENERAL SPECIFICATIONS

Operating Temperature Range: -30°C to 80°C
Isolation Voltage: 4000 Vrms
Minimum Off-State dv/dt: 500V/μsec

APPROVALS

UL E116949
CSA LR81689

MECHANICAL

See drawings on page 7

CRYDOM

DC CONTROL MODELS-SCR OUTPUT

Crydom Model Number	Line Voltage Range (Vac)	Load Current Range (Arms)	Control Voltage Range (Vdc)	Must Operate Voltage (Vdc)	Must Release Voltage (Vdc)	Surge Current 1-Cycle (Apk)
HD4812	80-530	.04-12	3-32	3.0	1.0	140
HD4825	80-530	.04-25	3-32	3.0	1.0	250
HD4850	80-530	.04-50	3-32	3.0	1.0	625
HD4875	80-530	.04-75	3-32	3.0	1.0	1000
HD4890	80-530	.04-90	3-32	3.0	1.0	1200

AC CONTROL MODELS-SCR OUTPUT

Crydom Model Number	Line Voltage Range (Vac)	Load Current Range (Arms)	Control Voltage Range (Vac)	Must Operate Voltage (Vac)	Must Release Voltage (Vac)	Surge Current 1-Cycle (Apk)
HA4812	80-530	.04-12	90-280	90.0	10.0	140
HA4825	80-530	.04-25	90-280	90.0	10.0	250
HA4850	80-530	.04-50	90-280	90.0	10.0	625
HA4875	80-530	.04-75	90-280	90.0	10.0	1000
HA4890	80-530	.04-90	90-280	90.0	10.0	1200

GENERAL SPECIFICATIONS

Operating Temperature Range: -30°C to 80°C
 Isolation Voltage: 4000 Vrms
 Minimum Off-State dv/dt: 500V/μsec

APPROVALS

UL E116949
 CSA LR81689
 VDE 10104

AVAILABLE OPTIONS

- 10** Non-Zero Cross, Phase Controllable
 Example: **HD4850-10**
- E** 24 VAC Input (18-36 Vac)
 Example: **HA4850E**

Series HA Series HD

12-90Amp
 480 VOLT
 AC OUTPUT

SMT

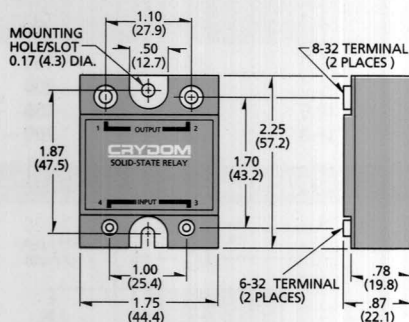
- Zero Voltage and Random Turn-on Switching
- 1200 Volt Blocking
- Panel Mount

Crydom's new HA (AC control) and HD (DC control) relays incorporate the same proven technologies as our Series 1. All models come with 1200 V blocking as standard and are available in either zero-cross or random turn-on (phase controllable) versions.

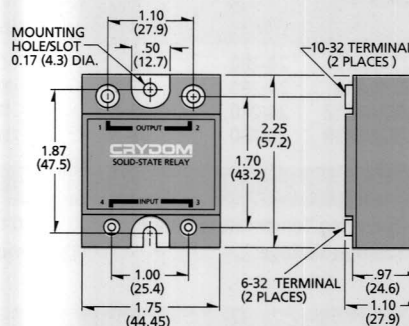
MECHANICAL

All dimensions are in inches (millimeters)

12-50A



75-90A



Note: Terminal screws and saddle clamps furnished, unmounted.



SMT

- Available with an SCR AC switch output (Series CS) or triac output (CT), all models feature low off-state leakage (snubberless), zero-voltage switching and have a broadened operating range (24-280Vac). This wide range permits optimum performance at both 120Vac and 240Vac line voltages.

SMT

- The Series EZ SPST-NO AC output relays offer a low profile package with the convenience of quick connect terminals. 4000 Vrms opto-isolation and low off-state leakage are standard. The Series EZ is the preferred choice for replacement of 120V and 240V Electro-mechanical relays.

Crydom Model Number	Line Voltage Range (Vac)	Load Current Range (Arms)	Control Voltage Range (Vdc)	Must Operate Voltage (Vdc)	Must Release Voltage (Vdc)	Surge Current 1-Cycle (Apk)
CSD2410	24-280	.1-10	3.5-15	3.5	1.0	120
CSD2425	24-280	.1-25	3.5-15	3.5	1.0	250
CSD2450	24-280	.1-50	3.5-15	3.5	1.0	500
CSD2475	24-280	.1-75	3.5-15	3.5	1.0	1000
CSD2490	24-280	.1-90	3.5-15	3.5	1.0	1200
CSE2410	24-280	.1-10	15-32	15.0	1.0	120
CSE2425	24-280	.1-25	15-32	15.0	1.0	250
CSE2450	24-280	.1-50	15-32	15.0	1.0	500
CSE2475	24-280	.1-75	15-32	15.0	1.0	1000
CSE2490	24-280	.1-90	15-32	15.0	1.0	1200
CTD2410	24-280	.1-10	3.5-15	3.5	1.0	120
CTD2425	24-280	.1-25	3.5-15	3.5	1.0	225

CS = SCR Output CT = Triac Output

UL	E116949
CSA	LR81689

See page 9.

Crydom Model Number	Line Voltage Range (Vac)	Load Current Range (Arms)	Control Voltage Range (Vdc)	Must Operate Voltage (Vdc)	Must Release Voltage (Vdc)	Surge Current 1-Cycle (Apk)
EZ240D12	24-280	.06-12	3-15	3.0	1.0	150
EZ240D18	24-280	.06-18	3-15	3.0	1.0	200
EZE240D12	24-280	.06-12	15-32	15.0	1.0	150
EZE240D18	24-280	.06-18	15-32	15.0	1.0	200

Crydom Model Number	Line Voltage Range (Vac)	Load Current Range (Arms)	Control Voltage Range (Vac)	Must Operate Voltage (Vac)	Must Release Voltage (Vac)	Surge Current 1-Cycle (Apk)
EZ240A12	24-280	.06-12	90-140	90.0	10.0	150
EZ240A18	24-280	.06-18	90-140	90.0	10.0	200
EZE240A12	24-280	.06-12	18-36	18.0	2.0	150
EZE240A18	24-280	.06-18	18-36	18.0	2.0	200

Operating Temperature Range: -30°C to 80°C
Isolation Voltage: 4000 Vrms

S Internal Snubber
Example: **EZ240D12S**

R Random Turn-on Switching
Examples: **EZ240D12R**
EZ240D12RS

-B Normally Closed
Examples: **EZ240D12-B**

Technical drawing of the CRAYCON Solid-State Relay showing dimensions in inches and millimeters. The drawing includes the following dimensions:

- Overall width: 2.63 (66.8)
- Distance between mounting holes: 2.24 (56.9)
- Mounting hole diameter: .177 DIA (2 PLCS)
- Overall height: 1.50 (38.1)
- Distance from mounting hole to top edge: .49 (12.4)
- Distance from mounting hole to bottom edge: .40 (10.2)
- Distance from mounting hole to side edge: .12 (3.0)
- Distance between terminals: 1.73 (43.9)
- Terminal height: .95 (24.1)
- Terminal width: .12 (3.0)

FASTON TERMINAL .250 X .032 4 PLCS.

DC INPUT MODELS

Crydom Model Number	Line Voltage Range (Vac)	Load Current Range (Arms)	Control Voltage Range (Vdc)	Must Operate Voltage (Vdc)	Must Release Voltage (Vdc)	Surge Current 1-Cycle (Apk)
TD1210	24-140	.05-10	3-32	3.0	1.0	100
TD1225	24-140	.05-25	3-32	3.0	1.0	250
TD2410	48-280	.05-10	3-32	3.0	1.0	100
TD2425	48-280	.05-25	3-32	3.0	1.0	250

AC INPUT MODELS

Crydom Model Number	Line Voltage Range (Vac)	Load Current Range (Arms)	Control Voltage Range (Vac)	Must Operate Voltage (Vac)	Must Release Voltage (Vac)	Surge Current 1-Cycle (Apk)
TA1210	24-140	.05-10	90-280	90.0	10.0	100
TA1225	24-140	.05-25	90-280	90.0	10.0	250
TA2410	48-280	.05-10	90-280	90.0	10.0	100
TA2425	48-280	.05-25	90-280	90.0	10.0	250

GENERAL SPECIFICATIONS

Operating Temperature Range: -30°C to 80°C
Isolation Voltage: 4000 Vrms

APPROVALS

UL E116949
CSA LR81689
VDE 58731

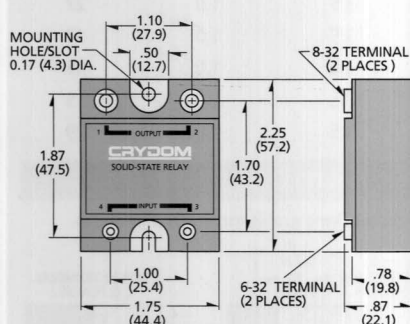
AVAILABLE OPTIONS

F	.250 Faston Terminals instead of Screw Terminals	Example: TD2425F
-B	Normally Closed (Form B) DC Control Models Only	Example: TD2425-B
E	24 Vac Input (18-36 Vac)	Example: TA2425E

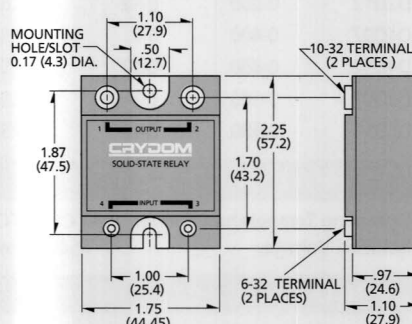
MECHANICAL

All dimensions are in inches (millimeters)

10-50A



75-90A (Series T - not applicable)



Note: Terminal screws and saddle clamps furnished, unmounted.

Series T

10-25Amp

AC OUTPUT

SMT

- Triac Output
- Industry Standard Package

The high reliability of surface mount assembled circuitry combines with cost-effective triac output. Snubbers are included for high DV/DT applications and inductive loads, together with zero-voltage switching to reduce inrush currents and electrical noise.

CRYDOM

Series DC60

3-7Amp
DC OUTPUT
60 VDC

SMT

- Industry Standard Package
- Cost Effective

Bipolar transistor outputs are available in 3, 5 and 7 amp ratings. Cost-effective relays offer 4000 Volt isolation and come in Crydom's standard panel-mount package.

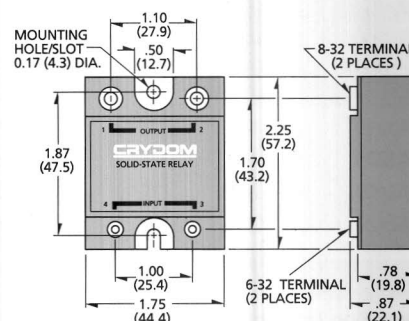
Crydom Model Number	Line Voltage Range (Vdc)	Load Current Range (Adc)	Control Voltage Range (Vdc)	Must Operate Voltage (Vdc)	Must Release Voltage (Vdc)	Surge Current 1 sec. (Apk)
DC60S3	3-60	.02-3	3-32	3.0	1.0	6.0
DC60S5	3-60	.02-5	3-32	3.0	1.0	10
DC60S7	3-60	.02-7	3-32	3.0	1.0	14

GENERAL SPECIFICATIONS

Operating Temperature Range: -30°C to 80°C
Isolation Voltage: 4000 Vrms

MECHANICAL

All dimensions are in inches (millimeters)



Series 1-DC

7-40Amp
DC OUTPUT
100-500 VDC

- MOSFET Output
- Low On-State Resistance
- Paralleling Capability for Higher Currents

DC output relays feature MOSFET technology for low on-state resistance, assuring easy paralleling and switching capabilities to 40 amps at 100 Vdc. Lower current models are also available to 500 Vdc. All models come in Crydom's standard panel-mount package.

Crydom Model Number	Line Voltage Range (Vdc)	Load Current Range (Adc)	Control Voltage Range (Vdc)	Must Operate Voltage (Vdc)	Must Release Voltage (Vdc)	Surge Current 10 ms (Apk)
D1D07	0-100	0-7	3.5-32	3.5	1.0	15
D1D12	0-100	0-12	3.5-32	3.5	1.0	28
D1D20	0-100	0-20	3.5-32	3.5	1.0	42
D1D40	0-100	0-40	3.5-32	3.5	1.0	106
D2D07	0-200	0-7	3.5-32	3.5	1.0	22
D2D12	0-200	0-12	3.5-32	3.5	1.0	27
D4D07	0-400	0-7	3.5-32	3.5	1.0	17
D4D12	0-400	0-12	3.5-32	3.5	1.0	36
D5D07	0-500	0-7	3.5-32	3.5	1.0	19
D5D10	0-500	0-10	3.5-32	3.5	1.0	29

GENERAL SPECIFICATIONS

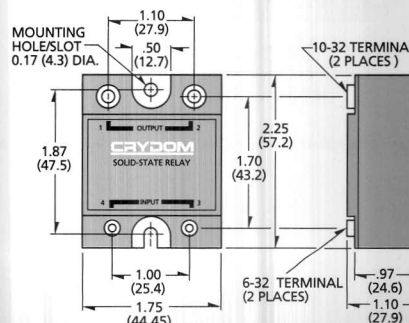
Operating Temperature Range: -30°C to 80°C
Isolation Voltage: 2500 Vrms

APPROVALS

UL E116950 (100 Volt Models)

MECHANICAL

All dimensions are in inches (millimeters)



CRYDOM

DUAL-SCR OUTPUT

Crydom Model Number	Line Voltage Range (Vac)	Load Current Range (Arms)	Control Voltage Range (Vdc)	Must Operate Voltage (Vdc)	Must Release Voltage (Vdc)	Surge Current 1-Cycle (Apk)
D2425D	24-280	.05-25	4-15	4.0	1.0	250
D2440D	24-280	.05-40	4-15	4.0	1.0	625

QUAD-TRIAC OUTPUT

Crydom Model Number	Line Voltage Range (Vac)	Load Current Range (Arms)	Control Voltage Range (Vdc)	Must Operate Voltage (Vdc)	Must Release Voltage (Vdc)	Surge Current 1-Cycle (Apk)
TD2420Q	24-280	.05-20	4-15	4.0	1.0	250

GENERAL SPECIFICATIONS

Operating Temperature Range: -30°C to 80°C
Isolation Voltage: 2500 Vrms

AVAILABLE OPTIONS

-10 Random Turn-on, Phase Controllable
Example: D2440D-10, TD2420Q-10

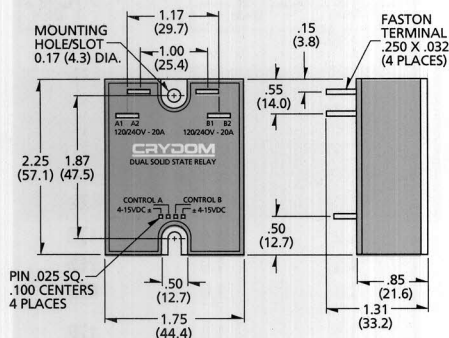
APPROVALS

UL E116949
CSA LR56256M9 (Dual Only)

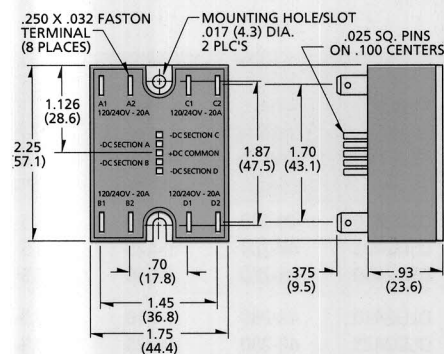
MECHANICAL

All dimensions are in inches (millimeters)

DUAL



QUAD



Dual Relays Quad Relays

120/240 VOLT AC OUTPUT

SMT

- Industry Standard Package
- Zero Voltage and Random Turn-on Switching

Two (Dual) or four (Quad) totally independent AC output relays come in a single standard panel-mount package. Utilizing an AC switch output with internal snubber, relays provide greater protection against false triggering. Model choices include zero-voltage or random turn-on (phase controllable) switching.

CRYDOM

Series 53TP

25-50Amp

3 PHASE

SMT

- SCR Output
- AC or DC Control
- LED Status Indicator

Three-phase solid state relays switch up to 530 Vrms directly to loads such as motors, transformers, heating elements, etc. Models are available with either AC or DC input (coil) control in zero-voltage or random turn-on switching versions.

DC INPUT MODELS

Crydom Model Number	Line Voltage Range (Vac)	Load Current Range (Arms)	Control Voltage Range (Vdc)	Must Operate Voltage (Vdc)	Must Release Voltage (Vdc)	Surge Current 1-Cycle (Apk)
D53TP25D	48-530	.05-25	3-32	3.0	1.0	250
D53TP50D	48-530	.05-50	3-32	3.0	1.0	625

AC INPUT MODELS

Crydom Model Number	Line Voltage Range (Vac)	Load Current Range (Arms)	Control Voltage Range (Vac)	Must Operate Voltage (Vac)	Must Release Voltage (Vac)	Surge Current 1-Cycle (Apk)
A53TP25D	48-530	.05-25	90-280	90.0	10.0	250
A53TP50D	48-530	.05-50	90-280	90.0	10.0	625

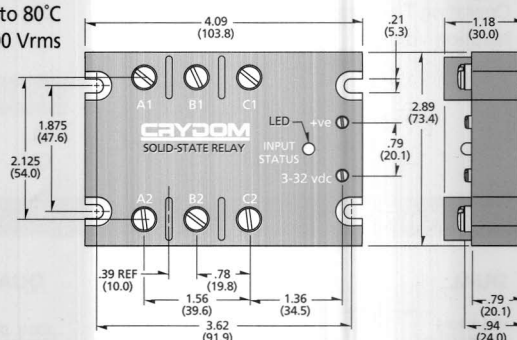
GENERAL SPECIFICATIONS

Operating Temperature Range: -30°C to 80°C
Isolation Voltage: 4000 Vrms

AVAILABLE OPTIONS

- 10** Non-Zero Cross, Instantaneous Turn-On
Example: D53TP50D-10
- DP** 2 Controlled, 1 Linked
Example: D53DP50D

MECHANICAL



Series DSD,DLD

TIME DELAY RELAY

10-50Amp

AC OUTPUT

SMT

- Industry Standard Package
- Externally Adjustable

These "on-operate" (pull-in) time-delay solid state relays are housed in a single industry standard package. AC output is controlled by a DC input and has an externally adjustable time delays. Choices include models with two time-delay ranges.

Crydom Model Number	Line Voltage Range (Vac)	Load Current Range (Arms)	Control Voltage Range (Vdc)	Must Operate Voltage (Vdc)	Must Release Voltage (Vdc)	Surge Current 1-Cycle (Apk)
DSD2410	48-280	.04-10	3.5-15	3.5	1.0	120
DSD2425	48-280	.04-25	3.5-15	3.5	1.0	250
DSD2450	48-280	.04-50	3.5-15	3.5	1.0	625
DLD2410	48-280	.04-10	3.5-15	3.5	1.0	120
DLD2425	48-280	.04-25	3.5-15	3.5	1.0	250
DLD2450	48-280	.04-50	3.5-15	3.5	1.0	625

GENERAL SPECIFICATIONS

Operating Temperature Range: -30°C to 80°C
Isolation Voltage: 4000 Vrms

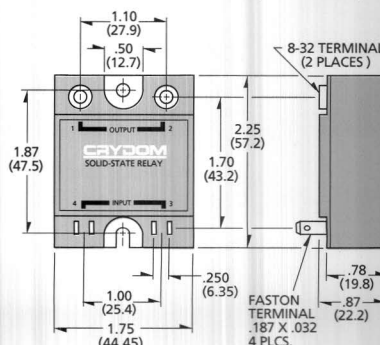
TYPICAL TURN-ON DELAY

For Various Timing Resistances

Resistor	Time (DSD)	Time (DLD)
0 (Short)	0.10 s	1.6 s
10KΩ	0.19 s	3.1 s
100KΩ	0.94 s	15 s
470KΩ	4.0 s	64 s
1.0MΩ	8.3 s	133 s

MECHANICAL

All dimensions are in inches (millimeters)



Series SST SOFT-START MODULES 10-90Amp AC OUTPUT

• 120 and 240 VAC Models

Models SST120 and SST240 auxiliary function modules gradually apply power to the load when energized by the control voltage. They must be used with Crydom Series 1 random turn-on solid state relays. Consult factory about use with 480 Vac loads. For a complete set (control module and solid state relay) order 10SST120, 25SST120, etc.

Crydom Model Number	Line Voltage Range (Vac)	Load Current Range (Arms)	Control Voltage Range* (Vdc)	Must Operate Voltage* (Vdc)	Must Release Voltage* (Vdc)	Surge Current 1-Cycle (Apk)
SST120*	90-140	*	3.5-10	3.5	1.0	*
10SST120	90-140	.04-10	3.5-10	3.5	1.0	120
25SST120	90-140	.04-25	3.5-10	3.5	1.0	250
40SST120	90-140	.04-40	3.5-10	3.5	1.0	625
SST240*	180-280	*	3.5-10	3.5	1.0	*
10SST240	180-280	.04-10	3.5-10	3.5	1.0	120
25SST240	180-280	.04-25	3.5-10	3.5	1.0	250
50SST240	180-280	.04-40	3.5-10	3.5	1.0	625
75SST240	180-280	.04-75	3.5-10	3.5	1.0	1000
90SST240	180-280	.04-90	3.5-10	3.5	1.0	1200

* Control Module Only, Must be used with -10 (Series 1) DC input relay

GENERAL SPECIFICATIONS

Operating Temperature Range: -30°C to 80°C
Isolation Voltage: 4000 Vrms

MECHANICAL

See Series CPV below.

DC INPUT MODELS

Crydom Model Number	Line Voltage Range (Vac)	Load Current Range (Arms)	Control Signal Range (Vdc)	Logic Supply Voltage (Vdc)	Surge Current 1-Cycle (Apk)
CPV120*	90-140	*	0-5	3.5-10	*
10CPV120	90-140	.04-10	0-5	3.5-10	120
25CPV120	90-140	.04-25	0-5	3.5-10	250
40CPV120	90-140	.04-40	0-5	3.5-10	625
CPV240*	180-280	*	0-5	3.5-10	*
10CPV240	180-280	.04-10	0-5	3.5-10	120
25CPV240	180-280	.04-25	0-5	3.5-10	250
50CPV240	180-280	.04-40	0-5	3.5-10	625
75CPV240	180-280	.04-75	0-5	3.5-10	1000
90CPV240	180-280	.04-90	0-5	3.5-10	1200

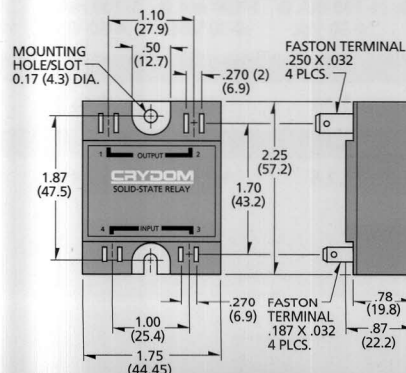
* Control Module only, must be used with -10 (Series 1) DC input relay.

GENERAL SPECIFICATIONS

Operating Temperature Range: -30°C to 80°C
Isolation Voltage: 4000 Vrms

MECHANICAL

All dimensions are in inches (millimeters)



Note: Consult factory for SST and CPV wiring diagrams.

Series CPV PHASE CONTROL MODULES

• 120 & 240 VAC Models

• 0-5 Vdc Phase Control

Models CPV120 and CPV240 auxiliary function modules provide control of the phased turn-on of a solid state relay, in response to the application of a 0-5 Vdc control signal. They must be used with Crydom Series 1 random turn-on solid state relays. Consult factory about use with 480 Vac loads. For a complete set (control module and solid state relay) order 10CPV120, 25CPV120, etc.

CRYDOM

Series IAC/IDC OAC/ODC SOLID STATE OPTO-ISOLATED I/O MODULES

Solid state I/O switching modules deliver an electrically clean, photo-isolated, noise-free "output" interface from logic level control systems to external loads such as motors, valves, solenoids, etc. -- or an "input"

interface from the load or sensors to microprocessor or computer-based logic level systems. Designed for long, reliable service in demanding industrial environments.

SYSTEM VOLTAGE 5 Vdc									
Model Number	IAC5	IAC5A	IDC5	IDC5B	IDC5D	OAC5	OAC5A	ODC5	ODC5A
Voltage Type	AC or DC Input	AC or DC Input	DC Input	DC Input	DC Input	AC Output	AC Output	DC Output	DC Output
Color Code	Yellow	Yellow	White	White	White	Black	Black	Red	Red
INPUT SPECIFICATIONS									
Voltage Range	90-140 Vac	180-280 Vac	10-36 Vdc	4-16 Vdc	3-32 Vdc	3-6 Vdc	3-6 Vdc	3-6 Vdc	3-6 Vdc
Typical Current @ Rated Voltage	7 mA	5 mA	8 mA	20 mA	13 mA	19 mA	19 mA	14 mA	14 mA
Typical Current @ Maximum Voltage	8 mA	5.5 mA	10 mA	23 mA	15 mA	22 mA	22 mA	18 mA	18 mA
OUTPUT SPECIFICATIONS									
Load Current Over Load Voltage Range	.1-100 mA @ .4-30 Vdc	.1-100 mA @ .4-30 Vdc	.1-100 mA @ .4-30 Vdc	.1-100 mA @ .4-30 Vdc	.1-100 mA @ .4-30 Vdc	.02-3A @ 12-140 Vac	.02-3A @ 24-280 Vac	.02-3A @ 5-60 Vdc	.02-1A @ 10-200 Vdc
Maximum Turn-on Time	20 ms	20 ms	5 ms	0.02 ms	5 ms	1/2 Cycle	1/2 Cycle	0.3 ms	0.5 ms
Maximum Turn-off Time	20 ms	20 ms	5 ms	1 ms	5 ms	1/2 Cycle	1/2 Cycle	0.3 ms	0.5 ms
Switching Type	Random	Random	Random	Random	Random	Zero	Zero	Random	Random
Notes	1,2,4,6	1,2,4,6	1,2,4	1,2,4	1,2,4	1,2,3	1,2,3	1,2,3	1,2,3
SYSTEM VOLTAGE 15 Vdc									
Model Number	IAC15	IAC15A	IDC15	IDC15B	IDC15D	OAC15	OAC15A	ODC15	ODC15A
Voltage Type	AC or DC Input	AC or DC Input	DC Input	DC Input	DC Input	AC Output	AC Output	DC Output	DC Output
Color Code	Yellow	Yellow	White	White	White	Black	Black	Red	Red
INPUT SPECIFICATIONS									
Voltage Range	90-140 Vac	180-280 Vac	10-36 Vdc	4-16 Vdc	3-32 Vdc	9-18 Vdc	9-18 Vdc	9-18 Vdc	9-18 Vdc
Typical Current @ Rated Voltage	7 mA	5 mA	8 mA	20 mA	13 mA	20 mA	20 mA	14 mA	14 mA
Typical Current @ Maximum Voltage	8 mA	5.5 mA	10 mA	23 mA	15 mA	25mA	25 mA	17 mA	17 mA
OUTPUT SPECIFICATIONS									
Load Current Over Load Voltage Range	.1-100 mA @ .4-30 Vdc	.1-100 mA @ .4-30 Vdc	.1-100 mA @ .4-30 Vdc	.1-100 mA @ .4-30 Vdc	.1-100 mA @ .4-30 Vdc	.02-3A @ 12-140 Vac	.02-3A @ 24-280 Vac	.02-3A @ 5-60 Vdc	.02-1A @ 10-200 Vdc
Maximum Turn-on Time	20 ms	20 ms	5 ms	0.02 ms	5 ms	1/2 Cycle	1/2 Cycle	0.3 ms	0.5 ms
Maximum Turn-off Time	20 ms	20 ms	5 ms	1 ms	5 ms	1/2 Cycle	1/2 Cycle	0.3 ms	0.5 ms
Switching Type	Random	Random	Random	Random	Random	Zero	Zero	Random	Random
Notes	1,2,4,6	1,2,4,6	1,2,4	1,2,4	1,2,4	1,2,3	1,2,3	1,2,3	1,2,3

CRYDOM

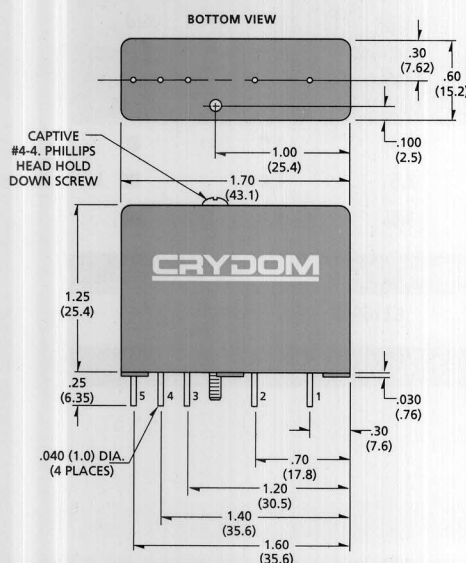
Series IAC/IDC OAC/ODC SOLID STATE OPTO-ISOLATED I/O MODULES

SYSTEM VOLTAGE 24 Vdc									
Model Number	IAC24	IAC24A	IDC24	IDC24B	IDC24D	OAC24	OAC24A	ODC24	ODC24A
Voltage Type	AC or DC Input	AC or DC Input	DC Input	DC Input	DC Input	AC Output	AC Output	DC Output	DC Output
Color Code	Yellow	Yellow	White	White	White	Black	Black	Red	Red
INPUT SPECIFICATIONS									
Voltage Range	90-140 Vac	180-280 Vac	10-36 Vdc	4-16 Vdc	3-32 Vdc	18-28 Vdc	18-28 Vdc	18-28 Vdc	18-28 Vdc
Typical Current @ Rated Voltage	7 mA	5 mA	8 mA	20 mA	13 mA	15 mA	15 mA	10mA	10 mA
Typical Current @ Maximum Voltage	8 mA	5.5 mA	10 mA	23 mA	15 mA	18 mA	18 mA	12 mA	12 mA
OUTPUT SPECIFICATIONS									
Load Current Over Load Voltage Range	.1-100 mA @ .4-30 Vdc	.1-100 mA @ .4-30 Vdc	.1-100 mA @ .4-30 Vdc	.1-100 mA @ .4-30 Vdc	.1-100 mA @ .4-30 Vdc	.02-3A @ 12-140 Vac	.02-3A @ 24-280 Vac	.02-3A @ 5-60 Vdc	.02-1A @ 10-200 Vdc
Maximum Turn-on Time	20 ms	20 ms	5 ms	0.02 ms	5 ms	1/2 Cycle	1/2 Cycle	0.3 ms	0.5 ms
Maximum Turn-off Time	20 ms	20 ms	5 ms	1 ms	5 ms	1/2 Cycle	1/2 Cycle	0.3 ms	0.5 ms
Switching Type	Random	Random	Random	Random	Random	Zero	Zero	Random	Random
Notes	1,2,4,6	1,2,4,6	1,2,4	1,2,4	1,2,4	1,2,3	1,2,3	1,2,3	1,2,3

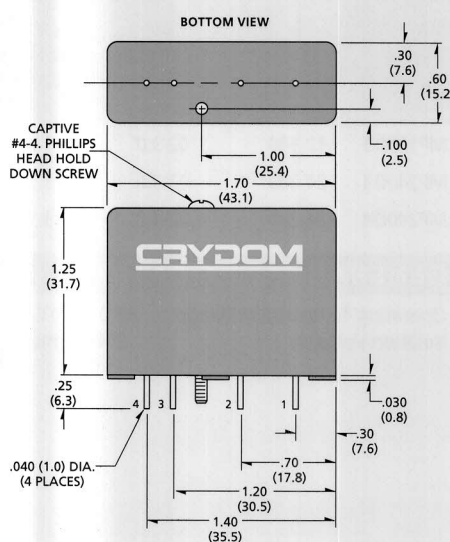
MECHANICAL

All dimensions are in inches (millimeters)

IAC/IDC



OAC/ODC



NOTES

1. UL recognized.
2. CSA certified.
3. The output of the AC output module is compatible with the input of the AC input module and the output of the DC output module is compatible with the input of the DC input module.
4. Input modules provide an output that is active low.
5. Output modules can be controlled from active or active high logic.
6. Input will operate on AC or DC voltage.

CRYDOM

Series DMP

AC & DC INPUT/OUTPUT MODULES

- Epoxy Conformal Coated
- Printed Circuit Board Mounting

Electrically identical to Crydom I/O modules, these AC and DC I/O modules are packaged in a hard, skin-tight epoxy conformal coating for excellent environmental protection and fast heat transfer. Pin-out matches Series 6.

SMT

SPECIFICATIONS

	DMP6101A	DMP6201A	DMP6202A	DMP6301A	DMP6402A
Voltage Type	DC Input	AC or DC Input	AC or DC Input	DC Output	AC Output
Electrical Equivalent	IDC5	IAC5	IAC5A	ODC5	OAC5

INPUT SPECIFICATIONS

Voltage Range	10-36 Vdc	90-140 Vdc	180-280 Vdc	3-6 Vdc	3-6 Vdc
Typical Current @ Rated Voltage	4 mA	6 mA	4 mA	3 mA	4 mA
Typical Current @ Maximum Voltage	13 mA	10 mA	7 mA	14 mA	20 mA

OUTPUT SPECIFICATIONS

Load Current Over Load Voltage Range	.1-100 mA @ .4-30 Vdc	.1-100 mA @ .4-30 Vdc	.1-100 mA @ .4-30 Vdc	.02-3A @ 5-60 Vdc	.02-3A @ 24-280 Vac
Maximum Turn-on Time	5 ms	20 ms	20 ms	0.5 ms	1/2 Cycle
Maximum Turn-off Time	5 ms	20 ms	20 ms	0.5 ms	1/2 Cycle

GENERAL SPECIFICATIONS

Operating Temperature Range: -40°C to 80°C
Isolation Voltage: 4000 Vrms

APPROVALS

UL E116949
CSA LR81689

MECHANICAL

See page 17

Series MP

3-4Amp AC OUTPUT, SIP

SMT

- High Packaging Density
- Compatible with 5 & 15 Volt Logic Systems

Available in 3Arms and 4Arms ratings, all are SPST-NO PC-mount relays that provide greater packaging density and compatibility with pinout of Series 6 and OAC output modules. Models include internal snubber for high dv/dt applications, together with zero-voltage switching to reduce high inrush currents and electrical noise.

Crydom Model Number	Line Voltage Range (Vac)	Load Current Range (Arms)	Control Voltage Range (Vdc)	Must Operate Voltage (Vdc)	Must Release Voltage (Vdc)	Surge Current 1-Cycle (Apk)
MP120D3	12-140	.02-3.0	3.5-18	3.5	1.0	80
MP240D3	24-280	.02-3.0	3.5-18	3.5	1.0	80
MP240D4	24-280	.02-4.0	3.5-18	3.5	1.0	80

GENERAL SPECIFICATIONS

Operating Temperature Range: -30°C to 80°C
Isolation Voltage: 2500 Vrms

APPROVALS

UL E116950

MECHANICAL

See page 17

- Series 6 buffered output modules contain additional internal amplification to reduce drive requirements to a level suitable for the Mos devices used in many microprocessor systems. Models are available with either inverting or non-inverting inputs, for 5 and 15 volt logic.

	6311*	6321**	6411*	6412**	6421*	6422**
Input on Voltage	0.0-0.8 Vdc	2.4-6.0 Vdc	0.0-0.8 Vdc	0.0-0.8 Vdc	2.4-6.0 Vdc	2.4-6.0 Vdc
Maximum Current @ Rated Voltage	100μA @ 0.0 Vdc	250μA @ 6.0 Vdc	100μA @ 0.0 Vdc	100μA @ 0.0 Vdc	250μA @ 6.0 Vdc	250μA @ 6.0 Vdc

	6341*	6351**	6441*	6442**	6451*	6452**
Input on Voltage	0.0-2.0 Vdc	8.0-18 Vdc	0.0-2.0 Vdc	0.0-2.0 Vdc	8.0-18 Vdc	8.0-18 Vdc
Maximum Current @ Rated Voltage	250μA @ 0.0 Vdc	200μA @ 18.0 Vdc	250μA @ 0.0 Vdc	250μA @ 0.0 Vdc	200μA @ 18.0 Vdc	200μA @ 18.0 Vdc

OUTPUT SPECIFICATIONS - 5 AND 15 VOLT

Load Voltage Range	3-60 Vdc	3-60 Vdc	12-140 Vac	24-280 Vac	12-140 Vac	24-280 Vac
Maximum Turn-on Time	100μs	100μs	1/2 Cycle	1/2 Cycle	1/2 Cycle	1/2 Cycle
Maximum Turn-off Time	100μs	100μs	1/2 Cycle	1/2 Cycle	1/2 Cycle	1/2 Cycle

All dimensions are in inches (millimeters)

BOTTOM VIEW

Overall width: 1.00 (25.4)
 Overall height: .40 (10.2)
 Hole diameter: .040 (1.0) DIA (4 PLACES)
 Hole spacing (center-to-center): .700 (17.8)
 Hole offset from side: .200 (5.1)
 Hole offset from bottom: .30 (7.6)
 Hole offset from right edge: .100 (2.5)
 Hole offset from left edge: .25 (6.35)
 Hole offset from bottom edge: .170 (43.1)

Technical drawing of the Crydom 100W LED module, showing top and side views with dimensions in inches and millimeters.

Top View Dimensions:

- Overall width: 1.00 (25.4)
- Distance from top edge to center of screw: .60 (15.2)
- Distance from center of screw to right edge: .30 (7.6)
- Distance from center of screw to left edge: .100 (2.5)
- Distance from left edge to center of screw: 1.70 (43.1)

Side View Dimensions:

- Overall height: 1.25 (31.7)
- Distance from bottom edge to top of screw: .030 (.76)
- Distance from bottom edge to center of screw: .25 (6.3)
- Distance from bottom edge to top of module: .70 (17.8)
- Distance from bottom edge to center of screw: 1.20 (30.5)
- Distance from bottom edge to top of module: 1.40 (35.5)
- Distance from bottom edge to top of module: 1.60 (40.6)

Other Dimensions:

- Distance from bottom edge to top of module: .30 (7.6)
- Distance from bottom edge to top of module: .70 (17.8)
- Distance from bottom edge to top of module: 1.20 (30.5)
- Distance from bottom edge to top of module: 1.40 (35.5)
- Distance from bottom edge to top of module: 1.60 (40.6)

Labels:

- CAPTIVE #4-4, PHILLIPS HEAD HOLD DOWN SCREW
- Crydom
- 5, 4, 3, 2, 1 (Pin numbers)
- .040 (1.0) DIA. (4 PLACES)

Series PB I/O MODULES MOUNTING BOARDS

These mounting boards accept I/O modules in any combination of input or output types. Modules are easily and quickly inserted without

disturbing field wiring. Features include; LED status indicator, plug-in 5 amp fuse and 3.3K ohm pull-up resistor for each module.

Model Number	PB-4	PB-4H	PB-4R	PB-8	PB-16A	PB-16T	PB-24
Module Positions	4	4	4	8	16	16	24
Input/Output Channels	4	4	4	8	16	16	24
Designed to Operate with Negative True Logic Systems and One Logic Voltage	Yes	Yes	No	Yes	Yes	Yes	Yes
Designed to Operate with Negative or Positive True Logic Systems and Different Logic Voltage	No	No	Yes	No	No	No	No

CONNECTIONS, FUSES, APPROVALS

Barrier Strip Screw Terminals for Field Connections	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Logic Connection Type	Screw Terminal	26, 50 Pin Card Edge	Screw Terminal	26, 50 Pin Card Edge	50 Pin Card Edge	Screw Terminal	50 Pin Card Edge
Connector Part Number Code	Note 1,2		Note 2		Note 2		
5 Amp Fuse: Bussman GFAI, or Littlefuse 275-005, or Littlefuse 255005	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5 Amp Fuse: Bussman GFAI, or Littlefuse 275-001, or Littlefuse 255001	No	No	No	No	No	No	Yes
UL Recognized	Yes	Pending	Yes	Yes	Yes	Yes	Yes
CSA Certified*	Yes	Pending	Yes	Yes	Yes	Yes	Yes

*Recognized/Certified for 125V max. with 5 amp fuses, for 250V max. use #22 solid copper jumper wire instead of 5 amp fuses.

NOTES: 1. 26-Pin Card Edge Connector; T&B Ansley P/N 609-2615M, 3M P/N 3462-001

2. 50-Pin Card Edge Connector; T&B Ansley P/N 609-5015M, 3M P/N 3415-001, Dale P/N EB43K25SGFW (WireWrap or Solder Connector).

Relay Accessories HEATSINKS PROTECTIVE COVERS RELAY HANDBOOK

HEATSINK SPECIFICATIONS

	HS-1	HS-2	HE-54	HE-90
Usage Rating	Up to 10A	Up to 25A	Up to 50A	Up to 90A

Note: Contact factory for heatsink dimensions and thermal information.

PROTECTIVE COVERS

KS100	Cover for Series 1 Solid State Relays
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SOLID STATE RELAY HANDBOOK

HDBK899	A comprehensive and informative book written by Anthony Bishop
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Over 200 informative pages of reference to the use and applications of Solid State Relays (SSRs). The book includes a detailed and comprehensive tutorial on SSRs and their usage in various industrial applications.

PART NUMBER IDENTIFICATION

Series Type	Current	Circuit Type	AC Line Voltage	Options
L-Case style	3 - 15 Amps	1 - 5	1 - 120 Volts	F - Free
(Ceramic	5 - 25 Amps	(see schematic	2 - 240 Volts	Wheeling
Base)	6 - 42.5 Amps*	diagrams)	3 - 280 Volts	Diode
			4 - 480 Volts	

Example: L512F

* 42.5 Amp Rating Not Available In Circuit 4

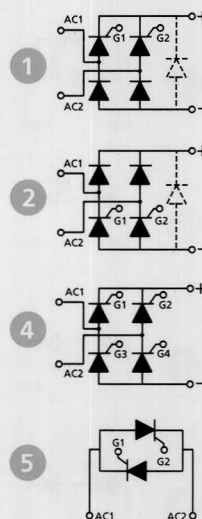
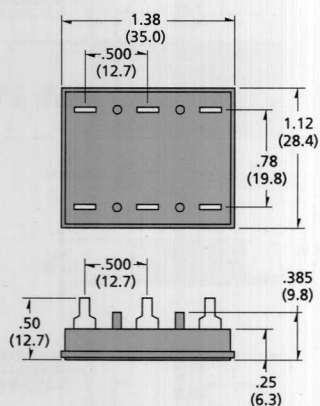
ELECTRICAL SPECIFICATIONS

SYMBOL	SPECIFICATION	L3	L5	L6
I_D	Maximum DC Output Current @ $T_c = 85^\circ\text{C}$ (A)	15	25	42.5
V_F	Maximum Voltage Drop @ Amps Peak	2.2V @ 15A	1.65V @ 25A	1.6V @ 42.5A
T_J	Operating Junction Temperature Range	-40°C to $+125^\circ\text{C}$		
di/dt	Critical Rate of Rise of On-State Current @ $T_J = 125^\circ\text{C}$ (A/ μs)	100		
dv/dt	Critical Rate of Rise of Off-State Voltage @ $T_J = 125^\circ\text{C}$ (V/ μs)	500		
V_{RMS}	AC Line Input Voltage (Repetitive Peak Reverse Voltage)	— 120 (400 V_{RRM}) —	— 240 (600 V_{RRM}) —	— 280 (800 V_{RRM}) —
		— 480 (1200 V_{RRM}) —		
I_{TSM}	Maximum Non-Repetitive Surge Current (A) [$1/2$ Cycle, 60Hz]	225	300	600
I^2T	Maximum I^2T for Fusing (A ² sec) [$t = 8.3\text{ms}$]	210	375	1500
I_{GT}	Maximum Required Gate Current to Trigger @ 25°C (mA)	60	60	80
V_{GT}	Maximum Required Gate Voltage to Trigger @ 25°C (V)	2.5	2.5	3.0
$P_{G(AV)}$	Average Gate Power	0.5W		
V_{GM}	Maximum Peak Gate Voltage (Reverse)	5.0V		
$R_{\theta JC}$	Maximum Thermal Resistance Junction to Ceramic Base per Chip	1.25 $^\circ\text{C/W}$	0.9 $^\circ\text{C/W}$	0.7 $^\circ\text{C/W}$
V_{ISOL}	Isolation Voltage	— 2500 V_{RMS} —		

MECHANICAL

SERIES L CIRCUITS

All dimensions are in inches (millimeters)



Series L

15-42.5Amp SCR/DIODE MODULES

- Low Profile
- Designed for Printed Circuit Board Connections

Circuit Modules provide ratings up to 42.5 amps in a low profile package designed for printed circuit board connections. Available in three standard bridge circuits and an AC switch version, all models have 2500 Vrms isolation and are UL recognized (file no. E72445).

CRYDOM

Series B-2T, B-2

25-42.5Amp
SCR/DIODE MODULES

- Eight Standard Circuits
- For AC or DC Variable Voltage Output Up To 15KW

Modules come in eight standard circuits and are designed to control AC or DC variable voltage output up to 15KW. The package comes with standard .250 quick-connect terminals. All models have 2500 Vrms isolation and are UL recognized (file no. E72445). Optional isolation barriers are available.

PART NUMBER IDENTIFICATION

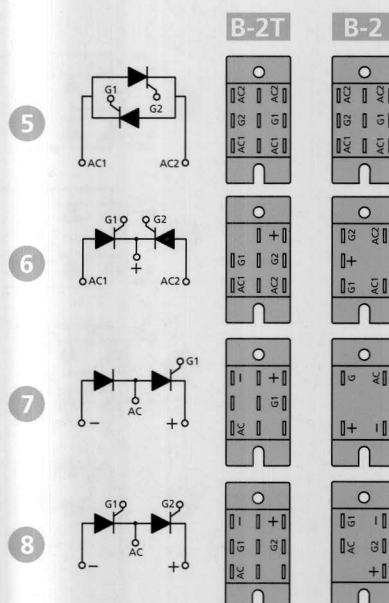
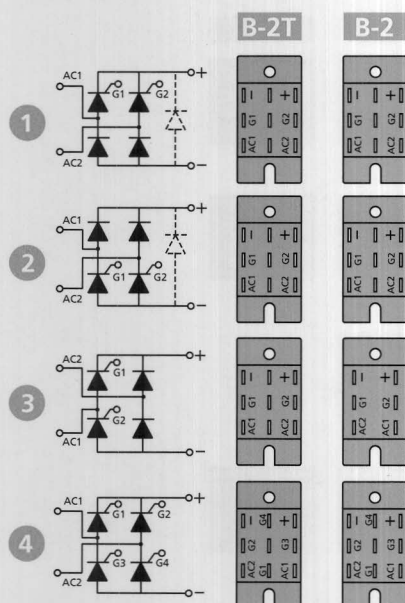
Series Type	Current	Circuit Type	AC Line Voltage	Options	Case Style
B - Case Style (Ceramic Base)	5 - 25 A 6 - 42.5 A	1 - 8 (see schematic diagrams)	1 - 120 Volts 2 - 240 Volts 3 - 280 Volts 4 - 480 Volts	F - Free Wheeling Diode SE - External Suppressor (-2T Only)	-2T (Std) -2 With Isolation Barriers

Example: B512FSE-2T

ELECTRICAL SPECIFICATIONS

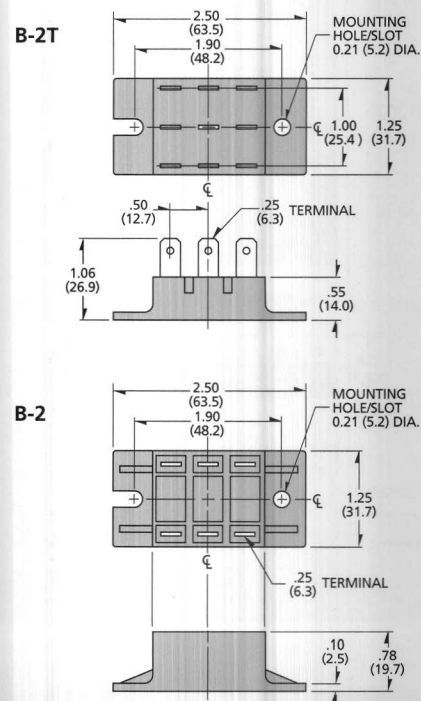
SYMBOL	SPECIFICATION	RATINGS	
		B5	B6
I_D	Maximum DC Output Current @ $T_c = 85^\circ\text{C}$ (A)	25	42.5
V_F	Maximum Voltage Drop @ Amps Peak	1.65V @ 25A	1.6V @ 42.5A
T_J	Operating Junction Temperature Range	-40°C to $+125^\circ\text{C}$	
di/dt	Critical Rate of Rise of On-State Current @ $T_J = 125^\circ\text{C}$ (A/ μs)	100	
dv/dt	Critical Rate of Rise of Off-State Voltage @ $T_J = 125^\circ\text{C}$ (V/ μs)	500	
V_{RMS}	AC Line Input Voltage (Repetitive Peak Reverse Voltage)	-120 (400 V_{RRM}) -240 (600 V_{RRM}) -280 (800 V_{RRM}) -480 (1200 V_{RRM})	
I_{TSM}	Maximum Non-Repetitive Surge Current (A) [$1/2$ Cycle, 60Hz]	300	600
I^2T	Maximum I^2T for Fusing ($A^2\text{sec}$) [$t=8.3\text{ms}$]	370	1500
I_{GT}	Maximum Required Gate Current to Trigger @ 25°C (mA)	60	80
V_{GT}	Maximum Required Gate Voltage to Trigger @ 25°C (V)	2.5	3.0
$P_{G(AV)}$	Average Gate Power	0.5W	
V_{GM}	Maximum Peak Gate Voltage (Reverse)	5.0V	
$R_{\theta JC}$	Maximum Thermal Resistance Junction to Ceramic Base per Chip	0.9°C/W	0.7°C/W
V_{ISOL}	Isolation Voltage	2500 V_{RMS}	

SERIES B-2T, B-2 CIRCUITS



MECHANICAL

All dimensions are in inches (millimeters)



CRYDOM

PART NUMBER IDENTIFICATION

Series Type	Current	Circuit Type	AC Line Voltage	Options
M50-Case style	50 - 50 Amps	1 - 8	1 - 120 Volts	F - Free Wheeling Diode
	100 - 100 Amps	(see schematic diagrams)	2 - 240 Volts	V - External Suppressor
			3 - 280 Volts	
			4 - 380 Volts	
			5 - 480 Volts	

Example: M505012FV

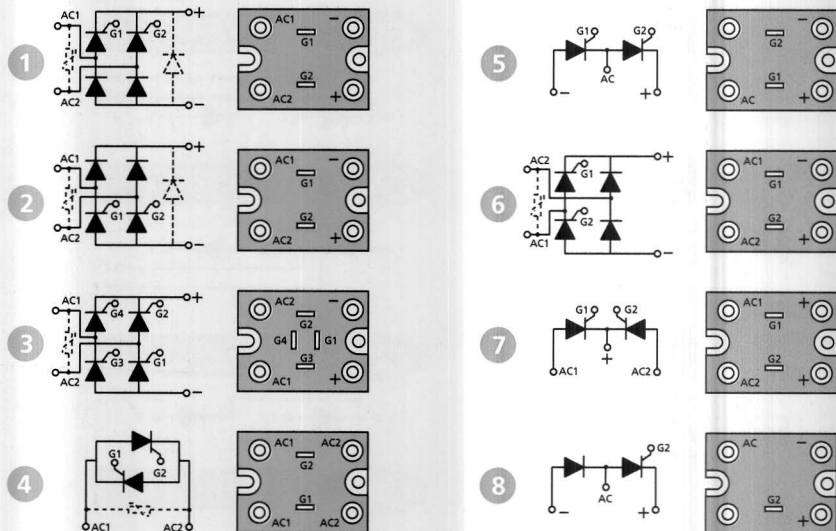
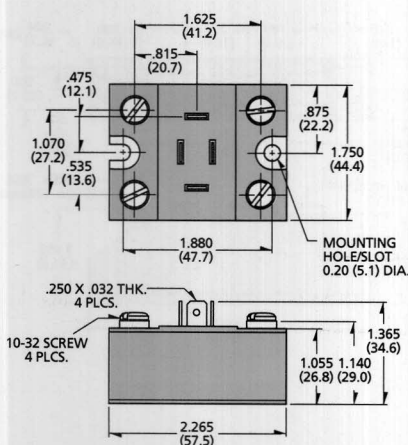
ELECTRICAL SPECIFICATIONS

SYMBOL	SPECIFICATION	M5050	M50100
I_D	Maximum DC Output Current @ $T_c = 85^\circ\text{C}$ (A)	50	100
V_F	Maximum Voltage Drop @ Amps Peak	1.7V @ 50A	1.4V @ 100A
T_J	Operating Junction Temperature Range	-40°C to $+125^\circ\text{C}$	
di/dt	Critical Rate of Rise of On-State Current @ $T_J = 125^\circ\text{C}$ (A/ μs)	100	
dv/dt	Critical Rate of Rise of Off-State Voltage @ $T_J = 125^\circ\text{C}$ (V/ μs)	500	
V_{RMS}	AC Line Input Voltage (Repetitive Peak Reverse Voltage)	$-120 (400 V_{RRM}) -$ $-240 (600 V_{RRM}) -$ $-280 (800 V_{RRM}) -$ $-380 (1000 V_{RRM}) -$ $-480 (1200 V_{RRM}) -$	
I_{TSM}	Maximum Non-Repetitive Surge Current (A) [$1/2$ Cycle, 60Hz]	600	1500
I^2T	Maximum I^2T for Fusing ($A^2\text{sec}$) [$t=8.3\text{ms}$]	1500	9350
I_{GT}	Maximum Required Gate Current to Trigger @ 25°C (mA)	150	
V_{GT}	Maximum Required Gate Voltage to Trigger @ 25°C (V)	3.0	
$P_{G(AV)}$	Average Gate Power	0.5W	
V_{GM}	Maximum Peak Gate Voltage (Reverse)	5.0V	
$R_{\theta JC}$	Maximum Thermal Resistance Junction to Ceramic Base per Chip	0.7 $^\circ\text{C/W}$	0.36 $^\circ\text{C/W}$
V_{ISOL}	Isolation Voltage	2500 V_{RMS}	

MECHANICAL

SERIES M50 CIRCUITS

All dimensions are in inches (millimeters)



Series M50 50-100Amp SCR/DIODE MODULES

• Over 40KW Output Capability

The M50 Series modules utilize highly efficient thermal management of provide high surge capability, long lifetime and reliable performance. Available in eight standard circuits, all models come in an industry standard package, provide 2500Vrms from all terminals to the baseplate and are UL recognized (file no. E72445).

CRYDOM

Series F18

25-90Amp

DIODE,

SCR/DIODE MODULES

- Industry Standard Package and Circuits
- Power Control Building Blocks

Modules come in an industry standard package, offering nine circuits that can be used singly or as power control building blocks. All models feature highly efficient thermal management for greatly extended cycle life and are UL recognized (file no. E72445).

PART NUMBER IDENTIFICATION

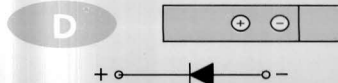
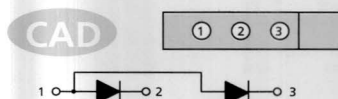
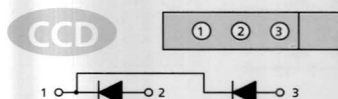
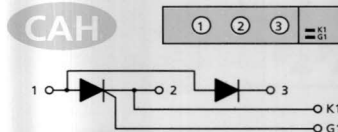
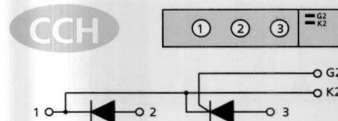
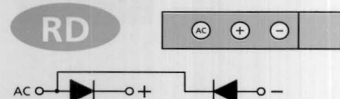
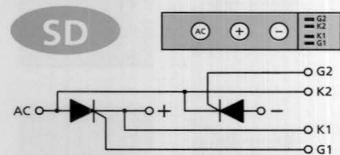
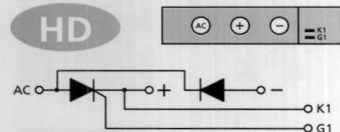
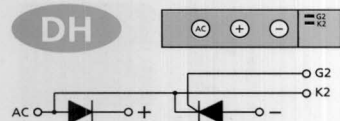
Series Type	Current	Circuit Type	Voltage	
F18-Case style	27 - 25 Amps	(see schematic diagrams)	400 - 120 Volts	Consult Factory for Higher Voltages
	42 - 40 Amps		600 - 240 Volts	
	57 - 55 Amps	Example: SD	1000 - 380 Volts	
	92 - 90 Amps		1200 - 480 Volts	
			1400 - 530 Volts	

Example: F1892SD1200

ELECTRICAL SPECIFICATIONS

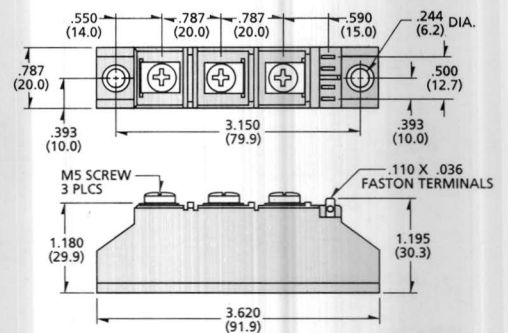
SYMBOL	SPECIFICATION	RATINGS			
		27	42	57	92
$I_{T(AV)}$	Average Output Current per Device @ $T_c = 85^\circ\text{C}$ (A)	25	40	55	90
V_F	Maximum Voltage Drop @ Amps Peak	1.55V @ 75A	1.4V @ 120A	1.4V @ 165A	1.4V @ 270A
T_J	Operating Junction Temperature Range	-40°C to +125°C			
di/dt	Critical Rate of Rise of On-State Current @ $T_J = 125^\circ\text{C}$ (A/ μs)	100			
dv/dt	Critical Rate of Rise of Off-State Voltage @ $T_J = 125^\circ\text{C}$ (V/ μs)	500			
V_{RRM}	Repetitive Peak Reverse Voltage (AC Line)	— 400 (120 Vac) —			
		— 600 (240 Vac) —			
		— 1000 (380 Vac) —			
		— 1200 (480 Vac) —			
		— 1400 (530 Vac) —			
I_{TSM}	Maximum Non-Repetitive Surge Current (A) [1/2 Cycle, 60Hz]	400	1000	1500	1950
I^2T	Maximum I^2T for Fusing (A^2sec) [$t=8.3\text{ms}$]	670	4150	9350	15800
I_{GT}	Maximum Required Gate Current to Trigger @ 25°C (mA)	150			
V_{GT}	Maximum Required Gate Voltage to Trigger @ 25°C (V)	3.0			
$P_{G(AV)}$	Average Gate Power	0.5W			
V_{GM}	Maximum Peak Gate Voltage (Reverse)	5.0V			
$R_{\theta JC}$	Maximum Thermal Resistance Junction to Baseplate Per Module	0.8°C/W	0.55°C/W	0.50°C/W	0.27°C/W
V_{ISOL}	Isolation Voltage	2500 V_{RMS}			

SERIES F18 CIRCUITS



MECHANICAL

All dimensions are in inches (millimeters)



PART NUMBER IDENTIFICATION

Series Type	Current (Amps)			Circuit Type	Voltage	Options
	10	30	AC SW.			
EF-Case style	D - 50	70	55	(see schematic diagrams) Example: 01	B - 400 (120 VAC)	F - Free Wheeling Diode
	E - 75	100	85		C - 600 (240 VAC)	
	F - 100	135	110		E - 1000 (380 VAC)	
	G - 125	170	140		F - 1200 (480 VAC)	
Example: EFD02CF					G - 1400 (530 VAC)	

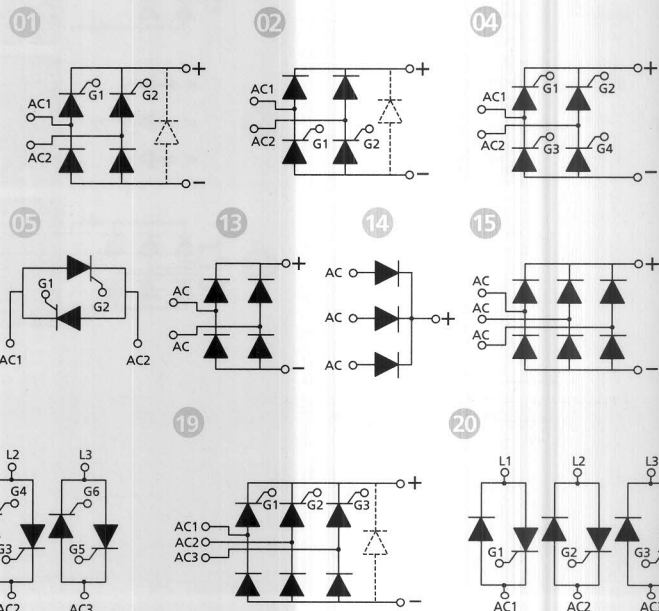
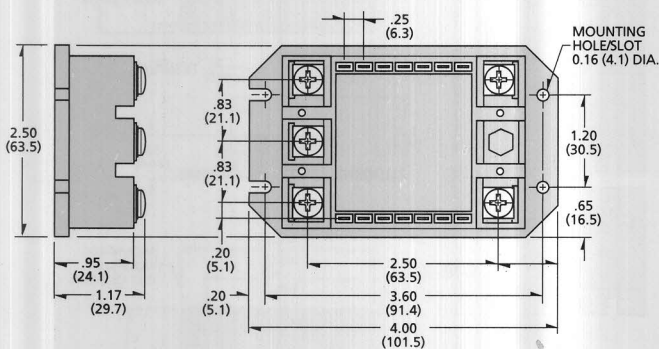
ELECTRICAL SPECIFICATIONS

SYMBOL	SPECIFICATION	RATINGS			
		D	E	F	G
I_D	Maximum DC Output Current @ $T_c = 85^\circ\text{C}$ (A)	(See Part Number Identification for Ratings of Single Phase, Three Phase and AC Switch Circuits)			
V_F	Maximum Voltage Drop @ Amps Peak	1.7V @ 50A	1.85V @ 75A	1.4V @ 100A	1.55V @ 125A
T_J	Operating Junction Temperature Range	-40°C to $+125^\circ\text{C}$			
di/dt	Critical Rate of Rise of On-State Current @ $T_J = 125^\circ\text{C}$ (A/ μs)	100			
dv/dt	Critical Rate of Rise of Off-State Voltage @ $T_J = 125^\circ\text{C}$ (V/ μs)	500			
V_{RRM}	Repetitive Peak Revers Voltage (AC Line)	— 400 (120Vac) — — 600 (240Vac) — — 1000 (380Vac) — — 1200 (480Vac) — — 1400 (530Vac) —			
I_{TSM}	Maximum Non-Repetitive Surge Current (A) [$1/2$ Cycle, 60Hz]	400	600	1500	1950
I^2T	Maximum I^2T for Fusing (A ^2sec) [$t = 8.3\text{ms}$]	650	1500	9340	15800
I_{GT}	Maximum Required Gate Current to Trigger @ 25°C (mA)	60	80	150	150
V_{GT}	Maximum Required Gate Voltage to Trigger @ 25°C (V)	2.5	3.0	3.0	3.0
$P_{G(AV)}$	Average Gate Power	0.5W			
V_{GM}	Maximum Peak Gate Voltage (Reverse)	5.0V			
$R_{\theta JC}$	Maximum Thermal Resistance Junction to Ceramic Base per Chip	0.8 $^\circ\text{C/W}$	0.7 $^\circ\text{C/W}$	0.36 $^\circ\text{C/W}$	0.3 $^\circ\text{C/W}$
V_{ISOL}	Isolation Voltage	2500 V_{RMS}			

MECHANICAL

SERIES EF CIRCUITS

All dimensions are in inches (millimeters)



Series EF 50-170Amp DIODE, SCR/DIODE MODULES

- High Thermal Efficiency
- Complete Power Control Circuits in a Single Package

These circuits provide complete power control in a single package, utilizing high thermal efficiency to assure long life and reliable performance. Twelve standard models provide 2500 V_{rms} isolation from all terminals to ceramic base and are UL recognized (file no. E72445).

Series B48-2T, B48-2

35-50Amp
DIODE MODULES

- Single and Three Phase Circuits
- Up to 1600 Volt Blocking Standard

Single- and three-phase diode circuits come in a panel mount package that provides 2500 Vrms isolation from the terminals to the ceramic base. Available in ratings up to 1600 Volts, all models are UL recognized (file no. E72445).

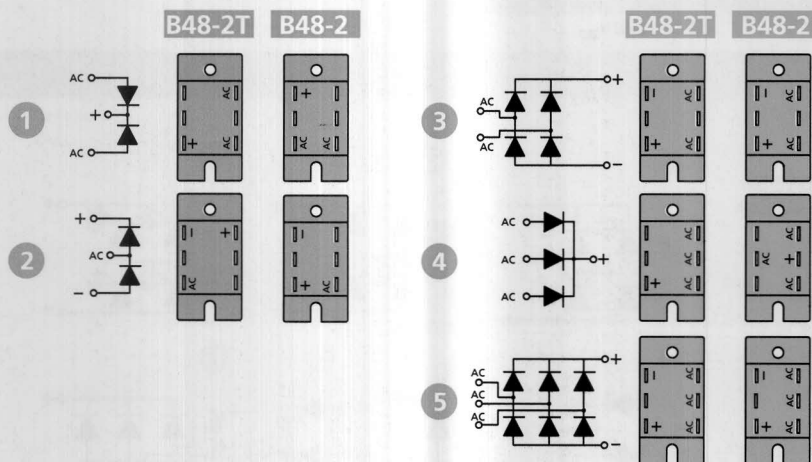
PART NUMBER IDENTIFICATION

Series Type	Circuit Type	Voltage	Case Style
B48	1 - 5 (see schematic diagrams)	B - 400 (120 Vac) C - 600 (240 Vac) E - 1000 (380 Vac)	F - 1200 (480 Vac) G - 1400 (530 Vac) H - 1600 (600 Vac)
Example: B483C-2T			- 2T (Standard) - 2 With Isolation Barriers

ELECTRICAL SPECIFICATIONS

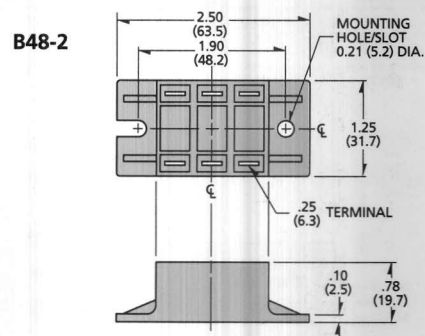
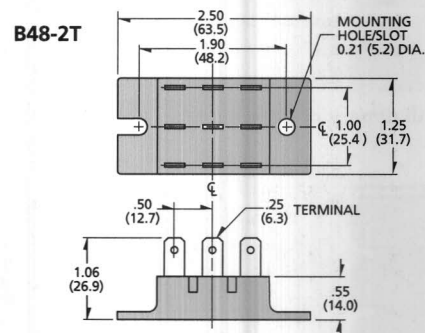
SYMBOL	SPECIFICATION	RATINGS	
		SINGLE PHASE	THREE PHASE
I_D	Maximum DC Output Current @ $T_c = 85^\circ\text{C}$ (A)	35	50
V_F	Maximum Voltage Drop @ Amps Peak	1.25V @ 35A	1.35V @ 50A
T_J	Operating Junction Temperature Range	-40°C to +125°C	
V_{RRM}	Repetitive Peak Reverse Voltage (AC Line)	- 400 (120Vac)	-
		- 600 (240Vac)	-
		- 1000 (380Vac)	-
		- 1200 (480Vac)	-
		- 1400 (530Vac)	-
I_{TSM}	Maximum Non-Repetitive Surge Current (A) [1/2 Cycle, 60Hz]	- 1600 (600Vac)	-
		600	
I^2T	Maximum I^2T for Fusing (A ² sec) [t=8.3ms]	1500	
$R_{\theta JC}$	Maximum Thermal Resistance Junction to Ceramic Base per Chip	0.9°C/W	
V_{ISOL}	Isolation Voltage	2500 V _{RMS}	

SERIES B48-2T, B48-2 CIRCUITS



MECHANICAL

All dimensions are in inches (millimeters)



PART NUMBER IDENTIFICATION

Series Type	Current	Circuit Type	Voltage	
M50	60 - 60 Amps	(see schematic diagrams)	400 (120 Vac)	1200 (480 Vac)
	100 - 100 Amps	Example: TB	600 (240 Vac)	1400 (530 Vac)
			1000 (380 Vac)	1600 (600 Vac)

Example: M50100TB1200

ELECTRICAL SPECIFICATIONS

SYMBOL	SPECIFICATION	M5060	M50100
I_D	Maximum DC Output Current @ $T_c = 85^\circ\text{C}$ (A)	60	100
V_F	Maximum Voltage Drop @ Amps Peak	1.35V @ 60 A	1.2V @ 100A
T_J	Operating Junction Temperature Range	-40°C to +125°C	
V_{RRM}	Repetitive Peak Reverse Voltage (AC Line)	— 400 (120 Vac) — — 600 (240 Vac) — — 1000 (380 Vac) — — 1200 (480 Vac) — — 1400 (530 Vac) — — 1600 (600 Vac) —	
I_{TSM}	Maximum Non-Repetitive Surge Current (A) [1/2 Cycle, 60Hz]	800	1500
I^2T	Maximum I^2T for Fusing (A ² sec) [t=8.3ms]	2650	9350
$R_{\theta JC}$	Maximum Thermal Resistance Junction to Ceramic Base per Chip	0.45°C/W	0.3°C/W
V_{ISOL}	Isolation Voltage	2500 V_{RMS}	

Series M50

60-100Amp
DIODE MODULES

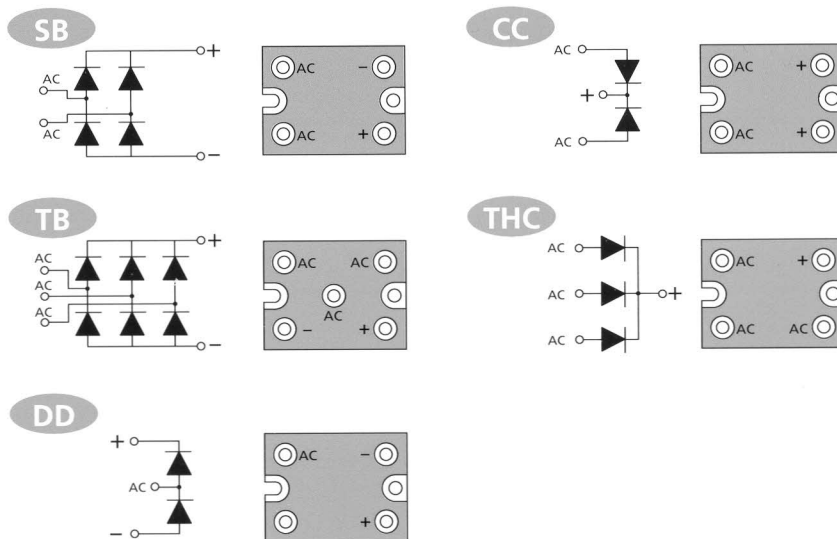
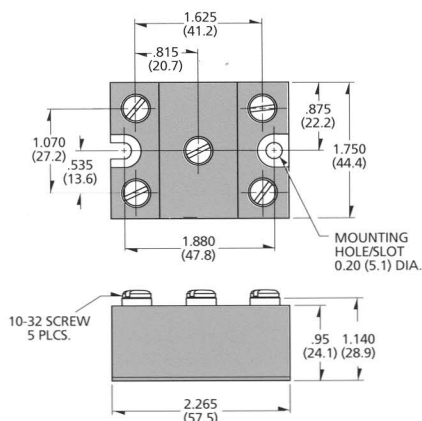
- High Surge Current Rectifier Circuits
- Up to 1600 Volt Blocking Standard

Single- and three-phase diode circuits incorporate highly efficient thermal management to provide high surge capability, extended life, and reliable performance. Available in five circuits, all models come in an industry standard package, provide 2500 Vrms from all terminals to the baseplate, and are UL recognized (file no. E72445).

MECHANICAL

SERIES M50 CIRCUITS

All dimensions are in inches (millimeters)



Specifications subject to change without notice.
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